

U.S. FISCAL AND SAVINGS CRISIS— IMPLICATIONS FOR LONG-TERM GROWTH

Y 4. F 49: S. HRG. 103-1015

U.S. Fiscal and Savings Crisis-Impl...

HEARING BEFORE THE SUBCOMMITTEE ON DEFICITS, DEBT MANAGEMENT AND LONG-TERM ECONOMIC GROWTH OF THE COMMITTEE ON FINANCE UNITED STATES SENATE ONE HUNDRED THIRD CONGRESS

SECOND SESSION

JUNE 17, 1994

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DEPARTMENT OF THE TREASURY
MAY 23 1995



U.S. GOVERNMENT PRINTING OFFICE
1994
200-737-0001

Printed for the use of the Committee on Finance

U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON : 1994

88-737-CC

For sale by the U.S. Government Printing Office
Superintendent of Documents, Congressional Sales Office, Washington, DC 20402
ISBN 0-16-047006-4

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U.S. FISCAL AND SAVINGS CRISIS— IMPLICATIONS FOR LONG-TERM GROWTH

FRIDAY, JUNE 17, 1994

U.S. SENATE,
SUBCOMMITTEE ON DEFICITS, DEBT MANAGEMENT,
AND LONG-TERM ECONOMIC GROWTH,
COMMITTEE ON FINANCE,
Washington, DC.

The hearing was convened, pursuant to notice, at 10:07 a.m., in room SD-215, Dirksen Senate Office Building, Hon. Bill Bradley, chairman of the subcommittee, presiding.

[The press release announcing the hearing follows:]

[Press Release No. H-40, June 16, 1994]

FINANCE SUBCOMMITTEE SETS HEARING ON U.S. SAVINGS AND PENSION ISSUES

WASHINGTON, DC.—Senator Bill Bradley (D-NJ), Chairman of the Committee on Finance Subcommittee on Deficits, Debt Management and Long-Term Growth, announced today that the Subcommittee will hold a hearing on the United States savings crisis and implications for security and long-term growth.

The hearing is scheduled for *10:00 A.M. Friday, June 17, 1994*, and will be held in room SD-215 of the Dirksen Senate Office Building.

"There are a number of threats looming for those planning their retirements," Senator Bradley said in announcing the hearing. "From our staggering national debt to pension security, we must turn our attention to issues affecting everyone's long-term economic future."

OPENING STATEMENT OF HON. BILL BRADLEY, A U.S. SENATOR FROM NEW JERSEY, CHAIRMAN OF THE SUBCOMMITTEE

Senator BRADLEY. The subcommittee will come to order. I would like to welcome all of the panelists today and guests who have come. This is the first in a series of hearings that we will hold in the Subcommittee on Deficits, Debt Management and Long-Term Economic Growth that will focus on what I think is the absolutely critical issue of savings and retirement security.

The topic of the hearing today is the United States Saving Crisis—Implications for Security and Long-Term Growth. Future hearings will try to disaggregate this issue into its component parts as well as to discuss specific policy options.

For today, however, I hope we will focus on the larger issue of whether there is truly a problem here that we as policymakers should address. The thrust of the hearing is to discuss the question of whether our Nation is saving enough from two perspectives.

The first is whether workers are saving enough currently to adequately provide for their retirement security. All too often we dis-

cuss the issue of savings in this institution without realizing that it has a human face. Frankly, we know that as a Nation we do not save at the same rates as other countries in the world.

But what does that really mean for a family in New Jersey? What will it mean for the construction worker who shifts in and out of different jobs and has no vested pension plan? What will it mean for a software engineer whose only nest egg is a defined contribution plan? What will it mean for the attorney with a family of four trying to send her kids to college and have enough left over for her own retirement?

I have read recent reports that tell us that the baby boom generation is accumulating assets at a rate greater than their parents. How confident should we be in those figures? I have to admit that I see a number of troubling trends and we will probably talk about those in the course of today's discussion.

I worry that today's generation will face much more of a challenge when they retire than their parents' faced. We see personal savings rates dropping, pension coverage rates stagnating and education and health care costs skyrocketing. We also are waiting longer to have children and we are living longer.

I hope we can try today to move out of the ivory tower of economic theory and data in an effort to focus on the impact these trends have on real families in New Jersey and across the country.

The second focus for the hearing is whether we as a nation are saving enough to generate sufficiently large increases in productivity to maintain or improve our standard of living. This larger macro economic issue obviously relates back to our first question. How much people need to save and how much they can save will obviously depend upon our economic health which is, in turn, dependent on our National rates of savings and investment. It is kind of a circle here.

If our fiscal house is not in order, it is our households that have reason to fear. If investments are the engine of growth for the economy, then savings are the fuel. The question is whether we will have enough fuel to meet our goals.

At a town meeting in New Jersey this spring a man about 25 stood up and asked me what he had to look forward to, implying he believed he did not have much to look forward to. I want to be able to tell that young man that our Nation is on the right track and that we still are on a path toward prosperity.

Unfortunately, I also see a number of troubling trends on this larger issue. Our national savings rate is only one-fifth that of our economic competitors and one-fourth of what they used to be in this Nation. Even with last year's budget bill, deficits continue to plague our budget largely due to runaway health care costs.

The Social Security Administration tells us that the trust funds will turn downward as early as 2013, at the same time as our pension system may become a net dissaver.

At some point the world will no longer sit idly by while we continue to pile up a national debt and have a personal savings rate of only about 6.3 percent. The government will have to take action and the longer we wait to do something the more costly doing anything will become.

I think it was General MacArthur who once said, there is no security in the world, there is only opportunity. I hope that we here today take the opportunity to begin a renewed debate on our National savings policy.

[The prepared statement of Senator Bradley appears in the appendix.]

I am very pleased that we have our two panels of distinguished economists and experts and I want to thank them for coming. Our first witness is Dr. Robert Reischauer, who is the Director of CBO and is no stranger to this committee and always steps to the table alone armed with his vast knowledge and trusty notebooks.

Dr. Reischauer, I want to welcome you to the subcommittee today and we welcome your testimony.

**STATEMENT OF ROBERT REISCHAUER, PH.D., DIRECTOR,
CONGRESSIONAL BUDGET OFFICE, WASHINGTON, DC**

Dr. REISCHAUER. Mr. Chairman, I appreciate the opportunity to appear before you and I commend you for holding this series of hearings on such an important topic. With your permission, I will summarize the prepared statement that I would like to submit for the record.

[The prepared statement of Dr. Reischauer appears in the appendix.]

Dr. REISCHAUER. I have organized my summary around four questions. First, is the national saving rate too low? The answer is undoubtedly yes, if we want to maintain an acceptable growth of living standards in the future.

In the 35 years before 1980, our rate of national savings averaged about 7.7 percent of the gross domestic product. Since 1980, the savings rate has averaged only 3 percent and last year it fell to a paltry 1.7 percent.

Some have suggested that a significant portion of the precipitous decline in the saving rate might reflect problems with the way saving is conventionally measured in the National Income and Product Accounts (NIPA).

For example, the decline could have been exaggerated because certain investment spending is counted as consumption, because the NIPA measure ignores the effect of inflation and capital gains, or because the depreciation of capital, which reduces national saving, might be overstated.

CBO evaluated these issues in some detail in a recent study and concluded that no matter how it is measured, national saving declined sharply over the past decade and a half. As a result of the decline, the growth of our living standards has been slowed. And until we reverse this decline, additional costs will be imposed on future generations.

This introduces the second question that I'd like to address: "How much does the decline in saving cost the Nation?" As a result of the shortfall in national saving we have a smaller capital stock than we would otherwise have, which in turn makes potential output and income lower than they would be otherwise.

Economists at the New York Federal Reserve Bank, using a standard growth accounting approach, have calculated that by 1989 the stock of productive capital was about 15 percent smaller than

it would have been if the national savings rate of the 1970's had been maintained.

By these economists' estimates, which are probably on the conservative side, the shortfall in productive capital had reduced the annual level of potential output by 5 percent or about \$239 billion by 1989 measured in 1987 dollars. If low rates of national saving continue, the United States can expect lower growth of productive potential and lower real incomes than would otherwise occur.

A conservative growth-accounting approach suggests that a permanent increase of 1 percentage point in national saving will raise living standards about 50 years from now by about a percentage point. Approaches that rely on new growth theory suggest a stronger relationship but are not widely endorsed by economists who deal with policy issues.

The third question I would like to address is, "What factors are responsible for the decline in saving?" The main cause of the decline can come as no surprise to anyone on Capitol Hill; it is the explosion of the Federal deficits.

Increasing Federal deficits accounted for about one-half to two-thirds of the decline in the saving rate between the 1970's and the 1980-1993 period. The balance could be attributed to the decline in private savings. But the exact reasons for the slump in private saving still perplex economists. Some small part of the decline may reflect population trends; that is, the increasing portion of the population that is made up of retirees who tend to save at low rates and the decreasing portion of those who are 40 to 64 years old and tend to have high rates of saving because they are preparing for retirement.

Some of the decline in private saving rates seems to have stemmed from stock market and real estate gains that allowed some to borrow against their increased wealth and use the proceeds to finance consumption.

Some have argued that the profligacy of the baby boomers is responsible for the recent drop in the rate of personal saving, but there is little evidence to support this view. Over the past decade and a half, most of the baby boomers were too young to have made much of an impact on the national saving rate because they were under 40 years old and younger adults tend to devote the lion's share of their incomes to consumption and always have.

Available evidence suggests that during the 1980's the most significant drop in personal saving rates occurred among older age groups, perhaps in response to increased benefits from Social Security and Medicare and the capital gains that they had received from housing and other assets.

The fourth question I would like to address is, "How is the baby boom generation positioning itself for retirement and what impact could this large cohort have on the national rate of saving?" Of course, it is too early to tell how the baby boomers will do in retirement, because they are just entering the years when people tend to do most of their saving for retirement and because they will face circumstances in the next two or three decades that we cannot predict. Furthermore, they will respond to those circumstances in ways that we cannot even speculate about.

On the basis of what we do know, however, there is no need to panic about the degree of preparedness of the baby boomers for retirement. In 1989, the ratio of wealth to income for households headed by baby boomers was comparable to that of their parents at similar ages before they reduced their savings rate.

Moreover, the levels of wealth that the boomers had accumulated at that point are comparable to what theoretical models of lifetime savings suggest is about optimal.

As baby boomers move into their peak years for both income and savings, they could be responsible for some modest improvement in the national rate. If the age-specific savings rates of the mid-1980's continue for the next 15 years, the aging of the population could result in roughly eight-tenths of a percentage point increase in the personal saving rate from 1990 to the year 2010.

Looking forward to the time when the baby boomers retire, national saving could fall because public and private retirement funds may sell assets to provide benefits to the large number of retirees and retired baby boomers spend down their assets. Such widespread dissaving could push up interest rates and depress asset prices.

Let me conclude by saying a few words about the current situation and the opportunity we face. Although the saving rate is dangerously low, we have turned a corner because there is widespread awareness that low saving is a significant national problem.

The passage of the Omnibus Reconciliation Acts (OBRA's) of 1990 and 1993 represented commendable first steps toward dealing with the problem. These steps are far from sufficient, however, to get us where we should go. If current government policies are left unchanged, deficits will begin to rise again toward the end of this decade. The increase will keep national saving too low to prevent a further slowdown in the growth of living standards.

Although there has been some modest improvement in private saving since 1989, when it hit a postwar nadir of 4.5 percent, no one expects that private saving will improve enough to offset the drain that is expected to result from increasing Federal deficits.

Even if private saving were to regain its 1970's level of 8.1 percent of GDP by the year 2004, projected deficits of 3.3 percent would still leave the national saving rate at 4.8 percent, which is a good deal below the 1970's average of 7.1 percent.

In the next few years we have an opportunity to make further significant strides in solving the problem of low rates of national saving. Inflation remains under control and the economy appears to be positioned well to absorb the short-term adjustments that necessarily come with deficit reduction.

If we make modest policy changes now, we can avoid making more drastic changes later. If we accept gradual policy changes now, individuals and businesses will be less disrupted than they will be if we are forced to adopt radical adjustments at some later date.

If we take advantage of this opportunity and act during the next few years, we can reap enormous future benefits. But if we fail to act soon, the opportunity will slip away and we will find ourselves scrambling to cope with the economic and political consequences of the retirement of the baby boom generation.

That concludes my summary and I will be happy to answer any questions that you might have.

Senator BRADLEY. Thank you very much, Dr. Reischauer, for your summary and full testimony. Basically, I take what you have to say is that there is no good news in the sense that national savings rates are still low. We are not saving enough. And you point out, quoting the Federal Reserve study, that our potential output would be, what, 5 percent higher if we were saving at 1970's rates?

Dr. REISCHAUER. That was in 1989. Presumably, it would be an even larger gap at this point.

Senator BRADLEY. So what would you guess it would be?

Dr. REISCHAUER. We have forgone a good deal of output and living standards are probably 6 percent or 7 percent below where they might have been. Federal revenues are lower than they might have been. Roughly one-quarter of any increase in GDP ends up in increased Federal receipts. So you can imagine that the situation you face here—trying to deal with the various needs of the people of New Jersey and the people as a whole—would be easier if those resources were available.

Senator BRADLEY. Does that mean that per capita income could have been that much higher?

Dr. REISCHAUER. Yes.

Senator BRADLEY. So that if we had simply saved at the rates of the 1970's, all of our incomes would be 6 to 7 percent higher today than they are?

Dr. REISCHAUER. They would be substantially higher than they are now. I do not want to get into whether it is 6 percent or 7 percent or 5 percent or 3 percent.

Senator BRADLEY. Right.

Dr. REISCHAUER. But we have to keep in mind that sometimes these numbers appear to be very small, such as when I said an increase in the national savings rate of 1 percentage point would produce an increase of living standards of about 1 percentage point 50 years later.

People say that is not very much until you think that per capita income in the United States over approximately the past decade and a half has been growing at only 1 percentage point, so in a sense you are gaining a year in history and it is a permanent gain. These changes really are very significant.

Senator BRADLEY. You are gaining a year?

Dr. REISCHAUER. I am saying that in terms of living standards you might be a year or two ahead.

Senator BRADLEY. So what you are saying is, if we saved at that rate, our living standard would be where it probably will be 2 years from now.

Dr. REISCHAUER. Perhaps near the end of this decade.

Senator BRADLEY. So translated into real people terms, if you were someone who used to have one car, a couple years from now you might have two cars, you would have those two cars now as opposed to two or 3 years from now, that type of thing.

Dr. REISCHAUER. Yes, that kind of analogy. But you might have a car and a bicycle.

Senator BRADLEY. Tell me what implications does the low national savings rate have for the individual who is trying to save to

target his or her own retirement and to provide for income in their retirement?

Dr. REISCHAUER. If we had been saving at higher rates we would have larger capital stock and the productivity of labor would have been higher. So the incomes of individuals would have been higher. They would have been more capable of saving a higher fraction of their incomes to prepare for retirement or put their children through college.

Senator BRADLEY. In other words, the common sense notion is correct, which is that if everybody individually was saving more or if we were not dissaving so much through a giant Federal budget deficit that there would be more money put aside for everybody's retirement.

Dr. REISCHAUER. The size of the economy would be larger when the individual retired. So there would be more resources available to support retirees, as well as to support working people.

Senator BRADLEY. The area in your projects about the rate of wealth creation for baby boomers is relatively optimistic in terms of, you know, what others might be saving. And, in particular, Professor Bernheim at Princeton finds that baby boomers are saving at only one-third of the rate required to finance a standard of living during their retirement, comparable to the standard of living they enjoyed before their retirement.

Is not the critical difference between your work and his, the standard by which you are judging savings adequacy? You are simply saying that the current baby boomers are saving more at this stage of their lives than did their parents save at the same stage in their lives.

Dr. REISCHAUER. Right.

Senator BRADLEY. And he is saying that whatever they are saving now is not going to be enough to continue their standard of living in retirement.

Dr. REISCHAUER. Remember, by most reckonings their parents are going into retirement fairly well situated and this is despite the fact that during the 1980's they apparently ratcheted back on their saving rate as a result of unanticipated capital gains and increased generosity of public and private pension systems. Lots of uncertainty will lie ahead for the baby boomers just as it did for their parents.

The one major difference between what Professor Bernheim has done and what CBO has done, is CBO is counting housing wealth as part of the assets of the population that are available for retirement. If one does that, I believe that Professor Bernheim's number jumps from around 30 percent to about 84 percent.

I do not think we are saying that there is not a problem for certain segments of the baby boom population. Clearly, those with little education—single-parent families, the younger baby boomers as opposed to the older baby boomers—have a lot of work cut out for them over the next few years.

But the bottom line of CBO's study would be that there is no reason to panic. There is always reason to keep your eye on this situation and encourage in any way the—

Senator BRADLEY. But do you assume they will spend down their housing assets?

Dr. REISCHAUER. To some extent, yes, they can.

Senator BRADLEY. And liquidate their homes in order to have retirement?

Dr. REISCHAUER. Remember, we have developed some innovative housing finance instruments, like reverse mortgages. This allows people to tap into their housing wealth without moving. Instruments like those were not available to previous generations and there is no reason to expect that people will not take advantage of them.

We also have to remember that while we were applying a rather easy test to the baby boomers, are you doing as well as your parents did at a similar point in your lives? We have to remember that over the next 20 years or so the incomes of the baby boomers will continue to rise. With those increases in income will come increased Social Security benefits—or the expectation of increased Social Security benefits—and greater private pension benefits.

So there are elements working to strengthen the position that CBO laid out in its paper. There are also other factors at work. You mentioned one, which is that many baby boomers delayed child-bearing until later in life.

Senator BRADLEY. Right.

Dr. REISCHAUER. Those who did may be dealing with college expenses for their children at the same time that their parents were empty nesters and capable of socking away considerable amounts for their retirement.

Senator BRADLEY. You see, one of the things that occurs to me and you might tell me whether you agree, is that the baby boomers might also have more demands on their savings. I mean, if you look at the parents of baby boomers, they came along when Social Security benefits were going up, pension benefits were generally going up, and inflation wiped out a lot of their debt. And yet baby boomers are not going to be in this particular position. And, in fact—

Dr. REISCHAUER. But the parents were certainly very lucky. There is no question about that. Lots of unexpected events broke in a favorable way for them. One concern that your question hints at is that as we try and bring down the deficit, it is conceivable that steps will be taken to limit the growth of Social Security or Medicare benefits in the future.

Senator BRADLEY. What I would kind of like to do is go down a list of things here that one might say differentiates a parent of a baby boomer who has benefited from all these things that have occurred over the last 15, 20 years from a baby boomer who is going to be coming into retirement.

One obviously is health care. I mean, if health care costs continue unabated, will not future retirees have significantly higher consumption requirements than current retirees?

Dr. REISCHAUER. I think that is certainly true and that is why this committee and the Congress are trying to grapple with this issue. One would hope that before the baby boomers hang up their work clothes we will have some major change in our health system that brings down the explosive increase in spending.

Senator BRADLEY. So that, absent significant action on health care costs, more and more of a baby boomer's retirement income is going to be eaten up by health care costs.

Dr. REISCHAUER. Correct.

Senator BRADLEY. Okay. And then the other fact, that the baby boomer is retiring earlier, but living longer. I mean, I have seen some studies that say that people born today are going to live to be 90 or 100 years on average. What impact will that have?

Dr. REISCHAUER. Of course that creates the need for more resources to support retirement. But there is nothing written in the stars that says that the average age of retirement has to continue to decline. In a sense, this is the consumption of leisure and you consume it if you can afford it.

We also have to remember that the changing structure of employment in advanced industrial nations means that more and more jobs do not have a big physical component and that people are capable of performing these jobs in their later years. So this is a choice variable. It is not something that we should take as given.

Recall also that in the 1983 amendments to the Social Security Act we have extended the age at which an individual will be able to receive full Social Security benefits and it will rise gradually, starting about the turn of the century, from 65 to 67. That might have some impact as well on the number of years that the baby boomers work.

Senator BRADLEY. But assuming this is about savings and assuming that you have an older individual or a baby boomer reaching retirement in the current savings climate. Given that individual's projected life span, there is a kind of inadequate savings to take care of that.

Dr. REISCHAUER. It is too late to do much about it. Generally, once you have retired if there is some medical advance that extends life another 5 years, you could find that you had not prepared adequately. Of course, that is one reason why policymakers are so reluctant to change benefits for Social Security recipients and other pensioners, except prospectively.

Senator BRADLEY. Right. Then you have a third area, which is housing, which the parents of baby boomers always thought, "Oh, well, that is my insurance policy. In case things really go wrong, I can sell the house." But you have a number of developments—adjustable rate mortgages, for example; dwindling demand; demographics.

Dr. REISCHAUER. The general feeling among housing economists is that the appreciation of residential real estate will not be nearly as rapid over the course of the next 20 or 30 years as it was during the previous period.

So there is every reason to believe that housing will not form the great nest egg for the baby boomers that it did for their parents unless they do more of the work themselves; in other words, paying down their mortgages.

Senator BRADLEY. Then you add to that the cost of education; what it is going to cost to educate the children of aging baby boomers. Right?

Dr. REISCHAUER. This cost comes in two different ways. One is that the parents of the baby boomers had many more children to

put through college. The increase in college attendance rates has been minuscule or nonexistent since the late 1960's. So we do not have a problem there.

Also, over the course of about the last 20 years the society has mechanisms by which the burden of sending a young adult to college has been shifted from the parent to the child through college loans. These were instruments that did not exist before the mid 1960's.

Senator BRADLEY. So on balance, what do you feel about education? I mean, the price is a lot higher.

Dr. REISCHAUER. I think that the educational burden that baby boomers bear will occur later in their lives than it occurred for their parents. And also it will often occur during those years when the previous age cohort would be saving for retirement.

Senator BRADLEY. So that there will be less money socked away for retirement.

Dr. REISCHAUER. Right.

Senator BRADLEY. Which means it only contributes to the potential problem of somebody who is now trying to figure out, "How am I, at 40 or 35, going to be prepared for retirement at 65 or 70?"

Dr. REISCHAUER. Right.

Senator BRADLEY. And if you add rising health care costs, that you are going to live longer and therefore you need more, that your major nest egg is not going to be as big as you always thought it would be, meaning housing, and that the education costs that you are going to incur for your children are going to hit you in what otherwise would have been your prime savings years, those are all factors that lead one to say that without dramatic increase in savings from somewhere, the baby boom generation is going to be in a much tighter position.

Dr. REISCHAUER. Let me give the other side of the balance sheet. One aspect of this would be that there is now much higher participation in the labor force by women than was the case with the baby boom generation's parents.

As a result, there are often two members of a family who will be receiving Social Security benefits or private pensions as a result of their own work efforts. I think that is important.

Senator BRADLEY. That is, if those pensions are adequately funded.

Dr. REISCHAUER. Remember, we stand behind those pensions with the Pension Benefit Guarantee Corporation. That might have an impact on national savings and the Federal deficit—

Senator BRADLEY. Right.

Dr. REISCHAUER[continuing]. But not necessarily on the living standards of those who are expecting to receive the pension benefits.

There is one other factor that we should not forget. That is that the baby boom generation is likely to receive far more in the way of inheritance from its parents than its parents received from the baby boomer's grandparents, many of whom were wiped out by the Depression and the war and had very difficult circumstances.

There is a substantial accumulation of wealth among the elderly and this will not be totally consumed during the retirement years and will be passed on. Wealth tends to be skewed. Large numbers

of people receive nothing. In any case, this is something that we should keep in mind.

Senator BRADLEY. What percent of the population do you think that is relevant to?

Dr. REISCHAUER. That is one to answer for the record.

[The answer appears in the appendix with Dr. Reischauer's prepared statement.]

Senator BRADLEY. Yes.

Dr. REISCHAUER. It is less than half.

Senator BRADLEY. Yes.

Dr. REISCHAUER. We are talking about something that we might regard as real money. It is certainly less than half of the population. But to the extent that housing wealth lies in the hands of the retired population and to the extent that that is not consumed—you suggested that people do not like to sell or move out of their houses—that indicates, I think, that there will be a good deal of housing wealth. Remember, something between 60 percent and 70 percent of the population are homeowners.

Senator BRADLEY. So that is what you are really talking about, inheritance, the family home.

Dr. REISCHAUER. Yes. But that is most Americans' major asset.

Senator BRADLEY. Okay. In the CBO analysis on baby boomers and wealth creation you assumed a positive real wage growth over the next 20 to 40 years. Now that clearly has not been the case the last 20 years.

Dr. REISCHAUER. It has been in the nation as a whole. There have been some tremendous shifts of relative incomes.

Senator BRADLEY. You mean wages have not been stagnant over the last 20 years?

Dr. REISCHAUER. No, they have not. They have grown. They have grown slower than they did in the 1950's and early 1960's, but they have grown. And I think we would expect them to grow, if, behavior does not change very much, about 1 percent or so a year.

We are not talking about immiserization here. We are talking about increases in standards of living that are not as high as we would like them to be.

Senator BRADLEY. So you are not talking about the 1960's, a 3 percent real wage growth?

Dr. REISCHAUER. No.

Senator BRADLEY. It is more like 1 percent. If you were off by a percent or two, what would that mean for families in this larger sense?

Dr. REISCHAUER. I mean, if average real income of families stagnated or even declined, we would obviously face a political environment that we have not had to cope with since the Depression.

I think it would be a very, very different kind of situation. We have a society, an economy, that needs a certain amount of income growth to operate smoothly. We are a private market economy that hands out some hard knocks to various groups at various times. We are a very diverse society geographically, racially, and ethnically.

And we are tied together by certain beliefs in opportunity and the ability of children to work hard and do better than their par-

ents, to have avenues of advancement open to people irrespective of sex, race, whatever.

When growth slows down, it is very difficult to maintain that openness and that set of beliefs. Those who control the institutions of advancement, be they access to higher education or to good jobs, try to limit the open accessibility and the meritocracy that we have now.

Senator BRADLEY. Right. But your analysis does seem to suggest that the wealth increases really have not reached down to all levels of society.

Dr. REISCHAUER. No, they certainly have not.

Senator BRADLEY. And we continue to be a society where those who have the education make much, much more than those who do not have the education and that this divergence is accelerating and widening with the passage of time. Certainly it has in the last decade. Is that not correct?

Dr. REISCHAUER. I believe it has since the early 1970's and there is a lot of discussion on what the causes of these trends are. I think they have to do with technology and the integration of world economies.

Senator BRADLEY. But does it imply equalizing access to education is the key element here for higher education?

Dr. REISCHAUER. Quite frankly, I think the most important thing we could do would be to improve the quality of elementary and secondary education for the bottom half of the population.

Whether people go on or not, I think that die is cast at a much earlier stage. Some of these discrepancies would not be as great as they are if 95 percent of Americans were coming out of high school knowing the basic skills that are imparted in the educational systems of other countries.

Senator BRADLEY. This is frequently a debate about whether the upper 10 percent of the educated population pools everybody or whether you do it by moving the bottom 30 percent up a couple of rungs in terms of educational performance.

Your view is clearly that you move the bottom 30 or 40 percent up a couple of rungs in educational performance. Then that has a direct translation to increased wealth.

Dr. REISCHAUER. The top 10 percent of the Nation's students have always done extremely well when compared with those of other countries at the same level of education; the quality and achievement levels have been world class. That is not where we have failed. Obviously, having achieved top ranking in that dimension hasn't pulled up the bottom third.

Senator BRADLEY. Right. One of the numbers that you cite that I was particularly struck by was the number for unmarried individuals with children who according to your testimony have one-twentieth the wealth of married couples with children and one-third of the median income.

Now if this segment of the population is getting larger, it's now 30 percent, right, in terms of families with children, 30 percent or single parent with children.

Dr. REISCHAUER. That is very troubling, and those people will have a very difficult time in retirement.

Senator BRADLEY. That is my point. And talk about a time bomb in our retirement picture, they have virtually no—one-twentieth the wealth accumulation and one-third the income. What happens when they get to retirement?

Dr. REISCHAUER. The important data to look at is how those individuals change their circumstances over time. It is conceivable that many single parents with children will remarry at some point and go into retirement actually better situated than one might expect now.

I am not suggesting that there is not an increasing fraction of the population that is unmarried and turning 65.

Senator BRADLEY. Right.

Dr. REISCHAUER. Clearly that is the case. For those, it is going to be a tough haul.

Senator BRADLEY. What is your answer to what I think is kind of the crunch that we find ourselves in? That we have to increase savings in order to have more investment, enhanced productivity, et cetera, but in order to increase savings we have to follow policies that are going to decrease consumptions of individuals, either cutting back on entitlement or raising taxes.

Dr. REISCHAUER. No pain, no gain.

Senator BRADLEY. What is the path out of this? If you have your choice, decreased consumption or increased savings, obviously you would pick increased savings.

Dr. REISCHAUER. Yes. In the short run it is difficult for those individuals who were asked to decrease their consumption or pay higher taxes. It is painful, but in the long run the individuals and society benefit.

Senator BRADLEY. Are personal savings rates the key here?

Dr. REISCHAUER. They are certainly important. But as policymakers we have not really found the key to that door. We have tried many policies in the hope that they might stimulate private saving but we are not sure that any has worked.

The important thing to recognize is that Federal policymakers can do something about the national saving rate by reducing the Federal deficit. That is, dissaving that the Federal Government is engaged in. That is the most direct avenue, I think, toward improving the current situation.

Senator BRADLEY. Well, in order to do that so that you think it is easier to reduce the Federal budget deficit than it is to force people to save.

Dr. REISCHAUER. We have not tried to force people to save. Usually we have tried to bribe them to save.

Senator BRADLEY. I know.

Dr. REISCHAUER. When we bribe them we have been pretty unsuccessful. Also, we are often increasing the Federal deficit to do it. So any success we might have in increasing private saving has to be measured against the increased dissaving that takes place because of the incentive.

I have not seen proposals, so I would not comment on mechanisms that force people to save.

Senator BRADLEY. Well, there are some out there. But let us keep with the idea that what we have to do is reduce the Federal budget deficit now.

Now, you mentioned Dr. Auerbach and Dr. Kotlikoff's work on generational accounting. The question really is, do you agree that the current fiscal path is unsustainable?

Dr. REISCHAUER. Yes.

Senator BRADLEY. You tell us that Federal deficits might reach upwards of 20 percent of GDP without some policy changes by the year 2020?

Dr. REISCHAUER. That is the General Accounting Office's number. We only go to 2004 and it is rising at that point.

Senator BRADLEY. Right, that is a GAO. CBO has a 10-year projection, right?

Dr. REISCHAUER. Right.

Senator BRADLEY. What does that show?

Dr. REISCHAUER. I believe we are seeing a deficit—

Senator BRADLEY. \$6 trillion or 55 percent of GDP.

Dr. REISCHAUER. Six percent of GDP or something like that.

Senator BRADLEY. \$6 trillion or six percent of GDP by 2004 and 55 percent of GDP by 2020.

Dr. REISCHAUER. That is GAO. CBO estimates 3.3 percent by 2004 and our eyesight falters after that.

Senator BRADLEY. So is it not a virtual certainty then given these numbers that either taxes will have to increase dramatically or entitlement will have to be cut dramatically?

Dr. REISCHAUER. I think the answer to that is yes, because, even if we eliminated all discretionary spending, it would not change this pattern substantially.

Senator BRADLEY. And if we do not do one or both of those things that we are reducing the retirement security of an entire generation?

Dr. REISCHAUER. We are really reducing the size of our economy. The size of our economy determines the amount of resources we have to distribute between the retired and the working populations.

It is always possible to keep one's promises to the retired population, but that would involve savaging the working population, transferring tremendous amounts of income from workers in the year 2020 to retired populations.

Senator BRADLEY. Through higher taxes.

Dr. REISCHAUER. Through higher taxes.

Senator BRADLEY. So it is either—

Dr. REISCHAUER. Or reduce spending on programs that benefit younger age cohorts—education, roads, whatever.

Senator BRADLEY. So there is no easy way out of this?

Dr. REISCHAUER. There is no easy way out.

Senator BRADLEY. And the longer we wait, the harder it will be.

Dr. REISCHAUER. That is the important message. By taking relatively modest steps now we can avoid taking rather disruptive and radical corrective measures 15 or 20 years from now.

Senator BRADLEY. Could you give for somebody who is listening to these numbers, and you are predicting radical steps 20 years from now, an idea of what kind of things are you talking about in terms of how people's lives might change or how their households might be hit or how their prospects might be affected?

What happens to them if we do nothing and what happens to them if we correct it now? How would you make it—

Dr. REISCHAUER. I do not have really a good answer to that question; nothing specific. But certainly if we raise taxes a percentage point or two now or shave back Federal spending by a few percentage points, we would put much of this problem behind us and would not have to make adjustments many times that big in the second decade of the next century.

Senator BRADLEY. How many times that big would you say?

Dr. REISCHAUER. You know—

Senator BRADLEY. See, the difficulty here is making it clear enough to people that what awaits them in the future absent action taken now is so draconian that it endangers relationships that we have established in a society and counted on in terms of political arrangements and economic arrangements in the private sector.

Dr. REISCHAUER. I am sure Professor Auerbach will give you numbers. I have the generational accounting framework, but those are his numbers.

Senator BRADLEY. So it suffices to say that you in your position as the head of CBO simply say it is going to be very difficult, very tough?

Dr. REISCHAUER. Yes.

Senator BRADLEY. You would go that far. Okay.

One last question, that is, here we are where we are dissaving basically. And we have kind of set the example for the world. Increasingly the rest of the countries have higher deficits. We are unable ultimately to make up for our over-consumption by borrowing from others. Is that not at some point what comes into focus?

Dr. REISCHAUER. Through much of the 1980's, many of the industrial allies of the United States had balanced budgets or small surpluses. Many of them have now gone deeply into the red, even more than we have. But what saves them from the same kind of situation that the United States faces is they have relatively high personal saving rates.

As a Nation, you don't necessarily worry about what government is doing—saving or dissaving—or what the private sector is doing, but what business, households and government are doing in combination.

In the course of the 1980's, as the Nation saw its rate of saving decline, it did not pay the full price in the form of lower investment because the United States borrowed from abroad to maintain investment levels and thereby keep the level of capital accumulation higher than it otherwise would have been.

If other nations get into the same kind of situation that the United States is in, that is when their personal saving rates fall and government deficits continue to be large as they are in Germany and France and Belgium, we will have a much more limited ability to attract capital from abroad. Then we will bear the full price of our profligacy in the short run because we will have to make do with much lower levels of investment.

Senator BRADLEY. Or even if they have higher savings rates in Japan or Germany but they have a larger domestic deficit to finance, even though they continue to have higher savings rates than we do, they have less available for us because it is being used,

sopped up by their own internal budget deficit. In the last five to 6 years those deficits are much higher now than they were in the mid-1980's.

Dr. REISCHAUER. And, therefore, just simply by adding and subtracting there is less money available to finance our debt. That puts greater pressure on us, and great pressure on our savings, and greater pressure on the availability of money for everything from retirement to growth.

Senator BRADLEY. Right. Thank you very much, Dr. Reischauer. I appreciate you taking the time and also the work that your staff did to put this material together. I just have a few health care plans I would like you to cost out if you could by next week.

Dr. REISCHAUER. All right.

Senator BRADLEY. Our next panel consists of Alan Auerbach, Professor of Economics, University of Pennsylvania; Dallas Salisbury, the President of the Employee Benefit Research Institute, of Washington, DC, and Eugene Steuerle, Senior Fellow with the Urban Institute, Washington, DC.

Let me welcome all three of you to the subcommittee. I appreciate your taking the time to come in and share with us your thoughts for this subject. Why do we not begin with Dr. Auerbach.

STATEMENT OF ALAN AUERBACH, PH.D., PROFESSOR OF ECONOMICS, UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA, PA

Dr. AUERBACH. Thank you, Mr. Chairman. It is always a pleasure to be here. Let me summarize my testimony and begin by emphasizing six points that I try to elaborate on in that testimony.

First, in answer to the question that motivated this hearing, the U.S. is experiencing a savings crisis even for a traditionally low saving country. By virtually any measure the U.S. saving rate has fallen sharply in recent decades.

Second, this decline in saving has occurred even as demographics and the distribution of income have changed in ways favorable to increased saving.

Third, as the U.S. population continues to age and the baby boom generation reaches retirement, demographic factors will lead to further declines in the national saving rate.

Fourth, extrapolation based on current household saving patterns and the assumed continuation of fiscal policy suggests that members of the baby boom generation will experience lower retirement living standards than one would predict on the basis of normal economic growth.

Fifth, U.S. Fiscal policy is clearly on an unsustainable path. The national debt is on a course to explode at a rate much faster than GDP growth unless there is a substantial reduction in expenditures or a substantial increase in revenues or both.

The needed revision in fiscal policy is likely to have an adverse impact on the retirement living standards of the baby boom generation, unless there is a significant increase in household saving rates.

Sixth, on the issue of international competitiveness, a low national saving rate adversely affects international competitiveness and only policies to increase national saving and not policies aimed

at influencing international trade can influence the level of competitiveness for the nation as a whole.

Let me say a few words on each of these points in elaboration. I have two figures in my testimony. Dr. Reischauer referred to trends in saving rates, so I will only make a few references to these. But what the two figures illustrate are the by now well-known decline in U.S. savings rates.

The U.S. national saving rate, which to me is the most useful measure of saving because it looks at income as a whole and takes account of saving by both the government and households, was relatively stable at about 9 percent in the 1960's and 1970's. It dropped to below 5 percent in the 1980's, and for the first 4 years in the 1990's it was 2.5 percent.

That is, after accounting for replacement of depreciating capital, only 2.5 percent of our net national product was going toward increasing our National wealth.

A lot of people have looked at the sharp decline starting around 1980 and 1981 and blamed the fiscal policies of the 1980's. They certainly played a role as the decline in government saving and the increase in budget deficits occurred around that time and have been maintained to this date.

But if one looks at the personal saving rate, one can see that that is not all that is going on. The personal saving rate also began to fall in the 1980's, even with tax cuts that gave people more disposable income. So one can hardly blame the decline in government saving for the decline in personal saving that came at the same time.

And, indeed, with the greater fiscal responsibility that we have seen exhibited in the 1990's, the personal saving rate has continued to decline, even as government dissaving has declined and moved in a positive direction.

This decline in personal saving has occurred as the baby boom generation was moving into its peak saving years. This movement of the baby boom generation into middle age, when we expect most household saving to occur, by my calculations should have led to increases in saving in recent years, increases that should be continuing early into the next decade. The fact that these increases have not occurred and that indeed the personal saving rate has continued to decline is indeed very worrisome.

You referred in your statements earlier to the widening distribution of income we have experienced in the U.S., which is certainly a troubling phenomenon. One of the things that one normally associates with a wider distribution of income is a higher saving rate because of the differences in saving propensities of high and low income individuals. If there is one silver lining to a high concentration of income wealth among high income individuals, one would expect there to be a higher saving rate. And, indeed, often in a developing country context that tradeoff is contemplated. And yet we seem to have experienced the worst of both worlds in having a higher concentration of wealth and income and a lower saving rate at the same time.

I do not think there is any good explanation, except that perhaps the general feeling of well-being, the Alfred E. Newman approach

to providing for the future, perhaps encouraged by the profligacy of government in the 1980's.

In asking what the U.S. saving rates and, in particular, what the personal saving rates mean for the baby boom generation in retirement, Larry Kotlikoff and I did a study where we said, well, let us suppose that things remain the same, that personal saving rates in the future look about what they look like now, that fiscal policy does not change, that Social Security benefits projected actually occur, that tax rates do not change.

We said: "Given fiscal policy, given patterns of wealth accumulation, how will the baby boom do?" What we found was that not including the very large transfers projected to be received in terms of Medicare and Medicaid—and, of course, that is a very important issue—members of the baby boom generation, particularly younger members of the baby boom generation will not keep pace with the general projected economic growth in the economy.

That is, for example, the youngest members of the baby boom will barely be able to attain the same living standards as today's retirees, despite the fact that nearly four decades of economic growth will have occurred between when people have retired now and when the youngest baby boom members will retire.

A large reason for this is the fact that a lot of what they will be getting is projected to go toward medical care rather than toward other consumption. A lot of it is also due to the fact that savings rates are lower now than they were before and we are projecting continuation of these low saving rates.

To some extent there is the fact that taxes are a bit higher now as a result of the 1990 and 1993 Acts than they were a few years ago. But a big assumption maintained in these calculations that really makes them much too optimistic is that fiscal policy will remain the same.

Fiscal policy cannot remain the same. It was good to hear Dr. Reischauer talk about fiscal policy. A lot of people have looked at CBO and OMB projections for the near term and been relatively sanguine about the path that fiscal policy is on.

People at OMB and CBO who are producing these numbers are aware of the real circumstances, namely that demographic factors tend to mask the magnitude of the problem in the short run. Unfortunately, official statistics are only produced for the short run.

Because of the large surpluses that the OASDI portion of the Social Security system are running now, things do not look as bad as they really are. When that surplus turns into deficit early in the next century, we are going to have a very large swing from surplus in the Social Security system to deficit.

If you combine that with the increasing health care expenditures which will increase rapidly even if there is a control of health care costs, simply because there will be a greater fraction of the population receiving Medicare, and you put those things together, we have a truly explosive fiscal policy path, assuming that there are no changes in policy, that will cause the national debt to triple as a share of GDP by the year 2030 if nothing is done.

Larry Kotlikoff and I, in calculations using generational accounts, concluded that if no member of a generation currently alive is forced to bear any of this burden, then in order to stabilize the

national debt in the future at its much higher level, it will require tax rates of 82 percent of lifetime income of future generations.

Now how can numbers so large occur? The answer is delay. We have a very unsustainable path. It is going to appear to a lot of people soon that it is unsustainable. If we were to wait and wait and wait and force the entire burden onto future generations then it would lead to these scary tax rates.

But I do not think that is going to happen. Maybe I am too hopeful to think that fiscal policy will be changed soon. But surely it will be changed and this will affect some current generations. The good news is that the future generations will not bear 82 percent tax rates. But the bad news is that the baby boom generation which already is facing uncertain prospects concerning their retirement, given the amount that they are saving, will now have to bear the additional burden of benefit cuts, tax increases or both.

And as a result I think one can say with greater certainty than the base of calculations I presented would suggest that the baby boom generation is facing a private savings crisis, one which will probably be made worse when the public savings crisis is improved.

The final thing I talk about in my testimony is the implications of the saving crisis for international competitiveness and also about policies to increase national saving. I will just say a few words about competitiveness and then stop. Perhaps in questioning we can talk about policies to increase national saving.

The only point I want to make about international competitiveness is that competitiveness is a word which has a lot of different definitions to a lot of different people and it may make sense for individuals in particular industries to think about competitiveness in terms of how well their industry fares in export markets, how well they compete against foreign competitors.

From a national standpoint macroeconomic factors determine how much we are going to export, how much we are going to import. It is really just an issue of how much we are saving relative to how much we are investing. And if we do not save enough, then we are either going to have a current account deficit or we are going to have a very low rate of national investment.

Neither of those outcomes is a very good one. The only way to avoid that very unpleasant tradeoff is to have a higher national saving rate.

So, from a national perspective, competitiveness ultimately means being able to enjoy a higher standard of living, which requires a higher rate of national saving. There really is not a competitiveness question separate from the national saving crisis. It would be very unfortunate if policymakers tried to think of them separately and tried to use trade policy as a substitute, thinking somehow that by bashing our foreign competitors we could overcome the problems that we have caused ourselves by having a low national saving rate.

Thank you.

[The prepared statement of Dr. Auerbach appears in the appendix.]

Senator BRADLEY. Thank you very much, Dr. Auerbach, for your testimony.

Dr. Steuerle.

STATEMENT OF C. EUGENE STEUERLE, PH.D., SENIOR
FELLOW, URBAN INSTITUTE, WASHINGTON, DC

Dr. STEUERLE. Thank you, Senator. With your permission I will also submit my complete statement for the record.

Senator BRADLEY. By all means.

[The prepared statement of Dr. Steuerle appears in the appendix.]

Dr. STEUERLE. Determining the adequacy of saving and the appropriateness of government's overall policy toward savings is a difficult one. In my view the nation's saving rate is clearly inadequate and there are appropriate policy responses, particularly with respect to the deficit.

But as you discussed with Dr. Reischauer, Mr. Chairman, there is no easy way out. Just as saving is the residual after consumption subtracted from income, so in my view is good saving policy a residual that derives from other good policy decisions, particularly with respect to budgets, pensions, taxes, financial markets, education, training and so on.

Get government debt onto a sustainable path, free up resources for policymakers and each generation to allocate to the needs of its time, and saving in the economy will be better allocated and it might increase. Try to ensure that individuals will have adequate resources in retirement in saving might increase, but it certainly will be better allocated. Determine a tax policy that treats different sources of income equally, an issue with which you are quite familiar, Senator, and saving will be better allocated and it might increase.

Please note that I keep using the word "might." The only sure way government can increase saving, and then only in the short run, is to engage in a fairly massive industrial policy—an approach in which the past failure, especially in the number of countries abroad, have been quite monumental.

Aggregate saving itself is difficult to regulate or control. One of our first inclinations is to equate the economy is saving with money put in savings accounts and similar accounts. But in point in fact for every depositor there is a borrower. Financial assets on one side of the ledger are debt on the other side of the ledger.

While this debt can support higher levels of investment, it may also support higher levels of consumption out of that debt by individuals who borrow, higher levels of dividend payment by corporations, or even higher salaries within the firm.

One example of how financial assets have translated into increased debt is shown in my testimony. What you will see there is that every sector of our economy has witnessed fairly significant increases in debt to asset ratios or in leveraging of their assets.

While the nonfinancial corporate sector, the sector we usually identify with investment, starts off the post-war period with the highest ratio, the non-farm, noncorporate sector eventually catches up and soon moves well into the lead. Most of the assets of that sector, as you may note, Senator, are real estate, which have become very highly leveraged.

If we look at the farm sector, we also find that the new borrowing of this sector far exceeds net capital investment, as farmers

borrow increasingly against their land to subsidize activities other than farm investment.

And the household sector, of course, has been growing at fairly fast rates, and often for consumption purposes. The anecdotal evidence is in the mail everyday—is in the number of credit card applications we get as well as in the applications for secondary mortgages to borrow against the value of our existing homes.

Complicating the saving issue even further these days is the movement from an industrial economy to a technological and a service sector economy. A dollar of gross saving can easily be borrowed or invested by a firm for research, for training of employees, maybe for hiring of professionals to try to learn how to enter into a foreign market, and so forth.

We as individuals also spend much time educating and training ourselves. These investments in human capital are not measured. They are huge in size and they are very difficult to count in the national accounts.

Although the focus of this hearing is on saving in the forms that translate traditionally into physical capital investment, in a larger sense it seems to me, Senator, that your real concern is with growth and with the adequacy of future income.

Growth is primarily generated by hard work, inventiveness, innovation, technological change, the generation of new ideas, the application of new and superior methods. Saving really can only go so far in substituting for these other sources of growth.

The conclusion is that we must pay as much if not more attention to the adequacy of human capital formation as we do to physical capital formation. This comment, by the way, is reflected in Dr. Reischauer's remarks about concentrating on primary and secondary education.

What I would like to do in the remainder of my testimony is to focus on three aspects of government policy—government debt itself, public retirement policy, and private retirement policy.

When looking at the issue of national saving, it is hard for any economist not to be concerned with the size of the budget deficit. Government dissaving has been on an unsustainable path, independently of how much of that dissaving translates actually into a decline in physical capital investment.

My concern, and it is one that you raised a little earlier, Senator, is that the industrialized nations of the world together may also be on an unsustainable budgetary path.

Gross public debt in industrialized countries has continued to rise relative to gross domestic product while deficits absorb significant percentages, often 30 or 40 percent of net private saving. Now while the United States may be an open market that can temporarily borrow from abroad, the world itself is a closed market.

The implication of this fiscal binge in industrial countries again stretch far beyond the issues of capital formation. Declining flexibility to respond to new domestic and foreign demands particularly have serious implications for our well-being and growth.

The invitation for this hearing also asked that we pay some attention to issues of retirement policy, including our ability to meet the needs of future retirees. In my view our retirement policy has become a mish-mash with goals less and less clearly articulated,

even while public spending on cash and health benefits and retirement and health continue to occupy increasingly dominant shares of the Federal budget. That is, the amount we spend on consumption in the budget rises continually.

The Nation is quite capable of providing a decent living in retirement to most Americans. But the ways in which we allocate government funds and provide incentives for private sector behavior are sometimes contradictory and less than fully responsive to the greater needs of society.

As you have indicated, Senator Bradley, all of these issues come full circle. To use another metaphor, it is a seamless web.

Along with Jon Bakija I recently examined increases in benefit levels in Social Security from an annual and a lifetime perspective. For an average wage one-earner couple retiring about 1960 at age 65 annual benefits were about \$9,400, using 1993 dollars. For a similar couple retiring in 1995 that annual benefit rolls to about \$14,600, an increase of a little more than 50 percent, leaving a fairly modest level of income in retirement.

If we instead calculate the lifetime insurance value, that is the cost, if purchased at age 65, of all Social Security benefits, including Medicare, the increase is far more dramatic. The insurance value of OASI cash benefits equals about \$144,000 for this couple retiring in 1960. But for the couple retiring in 1995 the insurance value of cash benefits and Medicare together are approaching about a half a million dollars, more than a three-fold increase.

By the time the tail end of the baby boomers retire in 2030, the insurance value for this average wage couple is scheduled to rise well above \$800,000. These scheduled increases into the future, as we know, are not sustainable.

My purpose in showing the insurance calculations is to demonstrate that even at today's levels of benefits the total amount of money spent on Social Security and Medicare can provide income support for individuals that would be adequate for a variety, if not most purposes.

As a nation, however, we have decided to allocate money mainly on the basis of formulas and rules that were determined years ago. There is one consequence. There remains significant numbers of poor elderly, especially among the very old, even while we provide more years in retirement and increase dramatically levels of health benefits—which by the way translate into higher salaries as well for medical service providers. These additional years of retirement and health benefits can be interpreted as allocating benefits away from need, further towards those years away from death and more toward years when we were both wealthier and healthier.

Another difficulty with both our public and private retirement system is that they are built on the model of the one-hoss shay. As you may remember from depreciation policy, Senator, the one-hoss shay was a piece of fiscal capital equipment that suddenly fell apart.

Our public and private retirements systems operate in a similar fashion, treating individuals as if they fall apart instantaneously and become unproductive at some age such as 62 and 65.

Now when individuals drop completely out of the work force and do so earlier and earlier in their lives, they reduce the total amount

of income produced in the economy. The effect on measured saving and saving rates is more difficult to predict because in fact they may start saving a slight bit more to support this earlier retirement.

But if we start measuring human capital and physical capital together, what we find is that there is a dramatic drop in the human capital that we now make available to society. Or put another way, we allow this human capital to depreciate much faster than it probably does in reality. Total income in the economy thus can still fall because of the decline in labor input even when saving might go up.

Finally, let me turn to the issue of the adequacy of our private pension system. By some measures the private pension system may appear to be in better shape than ever. At the beginning of this year households held close to \$5 trillion in pension reserves, up from less than \$400 billion 20 years ago. This 13-fold increase can be contrasted with increases in disposable income and net worth of about five to one.

With maturity, however, several problems remain of which I would like to just mention a few very briefly in this testimony. First, it now appears that only about half the population can really ever be expected to rely upon private pensions for any significant portion of support and retirement. Although a much larger fraction of workers will carry some benefits into retirement, a significant portion of them will have accruals insufficient to affect their life-style significantly.

Secondly, recent shifts towards defined contribution plans have opened up windows of opportunity for withdrawing funds prior to retirement. Mr. Salisbury will be talking about this further. So I will not go further into this issue.

And third, today's pension discrimination rules are contradictory, complicated and sometimes subject to the whims of inflation. At a moderate rate of inflation of 4 percent, for instance, a typical defined benefit plan may provide benefits for an additional year of work of 2 percent of pay for a 25-year-old employee but 35 percent of pay for a 65-year-old employee. This contrasts with defined contribution plans would require much more equal percentages of pay.

We need very much to sort out and decide just what these discrimination rules are intended to accomplish and whether they achieve their purpose of expanding coverage for low and moderate wage workers.

What does this cursory glance at saving policy tell us? I believe it tells us that there is no simple or quick fix. Instead, we must try to get each aspect of policy correct as we go along. At a minimum, budget policy requires less government dissaving and greater control by policy makers toward allocating funds toward current needs.

Social Security policy demands restoration of balance in the trust funds and greater orientation toward real needs of old age. Private pension policy requires more attention to the retirement needs of those with average incomes or less.

Thank you.

Senator BRADLEY. Thank you very much, Dr. Steuerle.
Mr. Salisbury?

STATEMENT OF DALLAS SALISBURY, PRESIDENT, EMPLOYEE BENEFIT RESEARCH INSTITUTE, WASHINGTON, DC

Mr. SALISBURY. Thank you, Mr. Chairman. I also ask that my full statement be included in the record.

Senator BRADLEY. Without objection. All statements will be included in the record.

[The prepared statement of Mr. Salisbury appears in the appendix.]

Mr. SALISBURY. Your letter asked me to focus on the retirement income aspect of this issue. Advance funded retirement plans, as Dr. Steuerle just mentioned, have accumulated over \$5 trillion in assets. If we add individual retirement accounts, that adds about another \$800 billion to the number.

Pension savings each year are a primary form of personal savings in the economy. Recent research by economists at the Brookings Institution found that 50 percent of net savings were pension savings between 1976 and 1980; 59 percent between 1981 and 1985; and 51 percent of net savings between 1986 and 1990.

This does not include any contributions made to public pension plans. This does not include any capital gains or any investment earnings as they accrue. The pension contribution to net savings is understated.

Some estimates indicate that to maintain living standards in retirement without selling one's home would require accumulated pension savings to be closer to \$12 trillion, than the \$5 trillion accumulated to date.

Those studies which were mentioned by Dr. Reischauer, however, find that approximately 84 percent of necessary savings is being done if one does include the assumption of spending down housing value.

The issues of what we count, however, assume future economic growth that is significant. And, what we assume about health care inflation is an essential assumption. Apparent contradictions in what different studies and different academics have said about the prospects for the baby boom rest heavily on what we count and basic assumptions.

CBO's study concludes that most baby boomers are likely to enjoy higher real incomes in retirement than their parents, assuming real wages continue to grow at approximately 1 percent per year, that Social Security and that private pensions remain intact. Dr. Reischauer and Dr. Steuerle find this to be an unlikely scenario for Social Security's current level of benefits. And, health care expenditures may outweigh other gains in the absence of some major changes in health care inflation.

CBO notes the prospects are not as sanguine for some demographic groups, particularly those who are single, those who are less educated, and non-homeowners. So even with fairly rosy assumptions, one still moves to the conclusion that problems lie ahead.

Assumptions also are key in these studies. A recent study released by AARP, done for them by Lewin-VHI, uses a relatively old model. It comes to the conclusion that 87 percent of baby boomers will receive pension income in retirement, but it has two central assumptions. One, that nearly 100 percent of all distributions from

all retirement programs are saved throughout the individual's working career. Two, that the only form of benefit payment ever allowed to a retiree is an annuity form.

These particular features are never mentioned in the study, just the 87 percent number, which is why I underline that looking at assumptions is crucial.

Policymakers in looking at those must determine their goals. Should we focus on absolute income levels or replacement of final income or some other combination? Many of the studies that say that the baby boom will not be able to achieve the retirement dream or the American dream are based on an assumption that every retiree must have 70 percent of final income and will not want to use housing wealth to get to 70 percent.

I will not feel sorry for Michael Eisner if he does not have 70 percent of \$200 million per year. I believe he still will have achieved the American dream.

Among all private sector wage and salary workers the pension system, as was noted in your opening statement, has had, if you will, some stability of coverage or, stagnation, to use your term. 1972 saw 48 percent of all wage and salary workers in the private sector with pension coverage. That went to 50 percent for 1979 and 1993. So the 48 to 50 percent has been fairly consistent.

This climbs to 56 percent if we look at full-time workers and 66 percent if we look at full-time workers of 40 and above. Participation in 401(k) plans has also grown significantly from 3 percent in 1983, to 14 percent in 1988, and 23 percent in 1993.

Among those offered the opportunity to participate in these defined contribution programs, such as the Federal Employee Thrift Plan, we saw growth in participation from 39 percent in 1983 to 67 percent in 1993. Changes in the law, such as five-year vesting, changes in work force patterns and 401(k) growth have combined to move the number of vested pension participants, those with a non-forfeitable benefit right, up to 86 percent of all participants in 1993, from 77 percent in 1988, from 52 percent in 1979.

Given the lump sum distribution activity that Dr. Steuerle mentioned, it is these vesting rates that are far more important in the current policy environment than coverage rates since we have ended up in recent years with about 10 million individuals per year taking lump sum distributions. Many benefiting from the system, but not having coverage in every job, means the system produces more than a simple coverage measure would imply.

There is no evidence, in spite of this tremendous 401(k) growth, of a universal employer shift from defined benefit plans to defined contribution plans. Of the net decrease in the number of defined benefit plans over 75 percent were plans with between two and nine active participants. Large employers generally continue to sponsor both defined benefit and defined contribution plans. A shift frequently means a more generous defined contribution plan and a less generous defined benefit plan.

This is not necessarily bad, I would note. Recently the Employee Benefit Research Institute undertook a study looking at whether it should move to a defined benefit pension plan. It found that in order to be better off under the defined benefit plan, any worker would need to stay with EBRI a minimum of 28 years of service.

We must look at the relative value of these plans when we reach conclusions about one being better than another.

It very much, as with so many of these things, depends on the individual. Pension plans now provide income to 30 percent of those age 55 and older, 37 percent of those age 65 and over, and about 50 percent of new retirees. During 1990 these programs paid benefits totalling \$234 billion in annuity payments and in 1990 \$126 billion in the form of lump sum distributions.

The most recent data available indicate that more individuals are saving lump sums for retirement, which is reasonably good news, but this is only 27 percent in 1993 versus 7 percent in 1980—27 percent is still not very high. If one looks at this in terms of dollars in 1990, \$53 billion paid in lump sum distributions was not preserved for retirement. Between 1987 and 1990, \$187 billion paid in lump sum distributions was not saved for retirement.

The preservation of funds originally set aside for retirement with the help of tax incentives must be viewed as a significant issue vis-a-vis goals of retirement income for the baby boom. In 1990, 86 percent of all lump sum distribution recipients were under the age of 59½ and 79 percent of all the dollars paid out were to individuals under 59½.

A great deal has also been written in the past about labor force change. The implication of this research, and statements in the media, being that in the good old days everyone stayed with one company for 30 to 40 years. In fact, life long data shows that only 13 percent of generations have ever stayed with a company 40 years or more, only approximately 31 percent for 30 years or more, and of the work force now in place only 58 percent has been in their job for 5 years or more. These are the same patterns we have seen for decades.

As a result, one has to reach the conclusion that we have always had a highly mobile work force, not that we are just now moving to one. This is very relevant to the growth of 401(k) plans for Federal employees and private employees alike. Only about half of all workers ever stay in a job for 20 years or more. For most workers coverage by defined contribution plans over their work life with preservation will provide more than defined benefit plans would provide as they move from job to job.

How long we participate is central, however, taking a simple model of 3 percent contributed per year. If that is contributed for 15 years it will produce 5 percent replacement in retirement after 25 years and 9 percent replacement after 35 years. If people wait until they are quite old to save, they are going to have to save a great deal of their income.

The time to raise public awareness is now. The way to have security in retirement is to take advantage of opportunities to save while working, and to begin taking advantage of them while very young. This hearing will hopefully begin to extend this message to the American public.

Thank you.

Senator BRADLEY. Thank you very much, Mr. Salisbury, for your testimony and your message.

Dr. Auerbach, anytime somebody says that you need an 82 percent lifetime tax rate, that gets my attention. Could you restate why that is necessary and what would be accomplished?

Dr. AUERBACH. Yes. Again, the point is that it is a hypothetical calculation. Some people have misinterpreted it as somehow predicting that that is what will happen. I hope it is not a prediction of what will happen. It is a calculation that says suppose we take not only the current national debt, but all the implicit liabilities we have to pay, Social Security benefits and Medicare benefits and the like, and suppose that we carry through with all these benefits with the growth of health care spending and so forth, and we do not do anything about taxes, at least as far as all those currently alive.

If we do that, the national debt will explode and we will be sitting with an enormous debt to GDP ratio. And if at that point we then say, okay, now let us stabilize it, the service on that debt will be so high that only tax rates as high as 82 percent—state, local and Federal combined—of income will be enough to service the national debt.

Senator BRADLEY. And given the present trends unabated in Social Security, health care, taxes, et cetera when would that come?

Dr. AUERBACH. Well, being a hypothetical calculation it is not a calculation as of a particular date. Let me put it in different terms because I have also done the calculations in a different way. If you wanted to take action today to stabilize the national debt and take care of everything in the future, it would take something like an immediate reduction of over 50 percent of Social Security benefits for all generations.

Senator BRADLEY. You mean to eliminate the—

Dr. AUERBACH. If you wanted to eliminate the imbalance that exists through a permanent action taken today.

Senator BRADLEY. You mean eliminate the deficit or eliminate the debt?

Dr. AUERBACH. Oh, no, no, just stabilize the debt and keep it from rising in the future as a ratio to GDP.

In another recent NBER working paper that I have just put out, I found that it would take about 4 percent of GDP, through an increase in taxes, decrease in benefits, or both on a permanent basis, to accomplish the same objective.

If you say, well, how can a number so big come about given that the deficits are not that big right now, all you have to do is look at, number one, the growth rate of Medicare that is projected; and, two, the fact that we are going to have a swing of about 4 percentage points of GDP in the Social Security system from surplus to deficit in the next century. There is nothing to pick that up.

Senator BRADLEY. So your 82 percent tax figure also is only to stabilize?

Dr. AUERBACH. Yes. There is no presumption that the debt will be paid off. When you get a level of national debt that is several times GDP, paying it off is out of the question. You really are just talking about making the interest payments on it to keep it from growing as a share of GDP.

Senator BRADLEY. So that is all you are talking about?

Dr. AUERBACH. That is all we are talking about.

Senator BRADLEY. Just the interest payments?

Dr. AUERBACH. Right.

Senator BRADLEY. So it stays at about what in terms of the deficit?

Dr. AUERBACH. Well, it would depend—I have not done it in terms of the deficit. But the debt to GDP ratio—if we do not do anything about our policy now, then in about 35 years the debt to GDP ratio will triple, going from about half of GDP to about 1½ times GDP.

Senator BRADLEY. And the result then requires 82 percent?

Dr. AUERBACH. Right.

Senator BRADLEY. Well, this is a very sobering number to say the least. Basically, what you are saying is, if we do nothing to change our policy, sometime in the early 21st Century, we will face the prospect of, if we are going to pay it off with taxes, an 82 percent effective tax rate on everybody's income.

Dr. AUERBACH. I think what I am really saying is that people may not realize how serious the problem is now, but at some point they will, and it will, I think, be before people actually start paying 82 percent tax rates.

Senator BRADLEY. No, no. Let us hope that the testimony drives us to do something now. But what are the assumptions underlying the figure or, that is, what would it take to pay it off?

Dr. AUERBACH. The assumptions underlying the calculation are simply a continuation of things as they are. No unusual assumptions go into the calculations.

Senator BRADLEY. So that we should view that figure as, what awaits us if we do not make any change?

Dr. AUERBACH. Well, I should say that every time we do the calculation the prospects get a little worse because the Social Security Trustees' annual reports are more pessimistic each year than they were the previous year. And, in fact, the 82 percent tax rate was based on last year's Trustees' report which was more optimistic than the one that just came out this spring. So if we redid it, it would probably be higher than 82 percent.

Senator BRADLEY. Now, you also have a calculation that raises taxes and cuts health and Social Security—and basically raises taxes by 32 percent, cuts health and Social Security benefits by 29 percent or do both by, what 12 percent?

Dr. AUERBACH. I think that sounds right.

Senator BRADLEY. Now, what is that? That is your alternative routine out there?

Dr. AUERBACH. We have said that suppose we thought an ethical way to respond to this fiscal problem was to try to balance the fiscal burdens of generations currently alive and those in the future, not just leaving the future generations holding the bag. We came up with calculations like that.

Then we considered what the implications were for the baby boomers in retirement. And starting from the calculations that we had done initially, these changes would deliver very significant drops in purchasing power. It would depend, of course, on the specific policy. Declining cuts in Social Security benefits would hit harder if they happened in the next 20 years than increases in income taxes because the baby boomers are getting on in years.

Senator BRADLEY. You testified that the younger baby boomers will be able only to match the retirement incomes of those who are 65 in 1992.

Dr. AUERBACH. That is right.

Senator BRADLEY. Even if we assume no change in policy.

Dr. AUERBACH. That is right. There are a couple of things going on there. The younger baby boomers do not have the assets that the older baby boomers have. They are about 20 years younger. The span is 18 years from the official beginning and end of the baby boom.

They are facing somewhat higher tax rates in the coming years than older baby boomers faced, for example, in the 1980's, and things are just going to be worse when they retire. Health care costs will have continued to have gone up, and in general the low saving rates that we observe today, if projected into the future, are simply not going to give them the assets that they will require.

Senator BRADLEY. So that you end up with about what percent of the baby boomers with lower real incomes than current retirees?

Dr. AUERBACH. Well, we phrase it in terms of standards of living. Even ignoring growth, about half of the youngest baby boomers would be worse off than the average retiree today. That is ignoring four decades of economic growth.

In our calculations we assume that productivity grows at three-quarters of a percent a year. You asked about stagnating real wages. We have assumed that productivity would grow at three-quarters of a percent per year forever. So this stagnant retirement consumption standard of living of the youngest baby boomers would be happening in the context of generally increasing economic activity.

Senator BRADLEY. What would you say is the best way to go about reducing this? Because it seems to me, you reduce the deficit, you reduce consumption.

Dr. AUERBACH. Right. Well, I guess the question is whose consumption. It is going to be someone's consumption. There are two ways to increase national saving. One is to reduce government consumption, government purchases. In some sense you could say, well, that does not affect baby boomers. Of course it does. It affects everybody, depending on what the money is being spent on.

And in any event, that is already being done. You have a hard freeze on discretionary spending, you have defense cuts and direct Federal Government purchases are not what they once were as a share of the budget.

So the real issue is, how do you cut the deficit in other ways and at the same time somehow leave the baby boom generation in a position where they can have any kind of standard of living in retirement. This was a question you asked Dr. Reischauer. It is not an easy question to answer. Somebody has to pay for this.

About all I would say is that the sooner action is taken the more generations will be forced to bear the burden of it. If you wait, then there will be some generations that will not bear the burden and, if you wait and let the baby boom generation off the hook, then you get to the 82 percent tax rates. So I guess all I would say is, act soon.

Senator BRADLEY. In particular, the number of Dr. Reischauer's about essentially the poor, in this case the single mother with kids, but it applies generally across the board in terms of the poor because they will have the biggest problem in retirement. Should we be doing anything now to stimulate savings on the part of the poor?

Dr. AUERBACH. I think if you can figure out a way to stimulate household saving you will be making great accomplishment.

Senator BRADLEY. Generally. Okay. I would like you to make your point on the trade/savings connection once again because one of the things that is I think not understood by the political process is this connection. Because any time you see a bilateral trade deficit, you see somebody saying what we ought to do is put up protections barriers or get access to their markets.

I would like you to try to draw the connection so that a non-economist might have a chance of understanding what you are talking about.

Dr. AUERBACH. Well, there are two points. You raised a separate point here which is a bilateral trade deficit. I suppose in some sense, just in the same way that a particular industry's trade deficit does not make a lot of sense to focus on, it does not make sense to focus on a bilateral trade deficit. Otherwise Japan should bash OPEC because it runs large trade deficits with OPEC.

The second question is the overall issue of trade. It is a result of the national income accounting identity that national saving minus national investment equals current account. The biggest, the most important component of the current account is the trade balance.

Senator BRADLEY. Now go through that once.

Dr. AUERBACH. Well, basically—

Senator BRADLEY. National savings is what, minus what?

Dr. AUERBACH. National savings, which is what we generate, the wealth that we accumulate, is either invested here or it is invested abroad. If it is invested abroad we are essentially sending things abroad. That is what generates a trade surplus.

If we have national saving less than domestic investment then we have a trade deficit. That is what happened in large part in the mid-1980's when we had a very sharp decline in our National saving rate. Our national domestic investment did not decline very much. So we imported a lot from abroad, both directly as capital and indirectly as imports of consumer goods, which allowed us to devote more of our resources to capital investment than we otherwise would have been able to do.

That is a fact. If we push down the balloon one place and we limit imports; then all it is going to do is increase imports somewhere else or decrease investment domestically. The only way out of that box is to generate more of the funds ourselves.

Senator BRADLEY. So if you increase savings, then work it through once more, what does it look like?

Dr. AUERBACH. Well, if we increase savings, then either we can increase domestic investment or we can increase the amount of the savings we send abroad, which means increasing exports or decreasing imports. Hopefully, the money will go wherever it is most productive and it should not necessarily be a bad thing if we are exporting it rather than investing it domestically.

But the point is, there is not going to be that unpleasant trade off that we face now when we have so little domestic savings that either we have to run a trade deficit or we have to defer domestic investment.

Senator BRADLEY. So that if you have all your National savings going into domestic investment and you need more investment in order to get the economy to grow the only place to get that is from abroad and the result is a trade surplus.

Dr. AUERBACH. Right. I think a historical point is worthwhile here. The U.S. ran big trade deficits in the late 19th Century. In retrospect, nobody thinks it was a terrible thing that we helped build the railroads with British funding and that the economy grew so rapidly as a result.

The reason why people look askance at trade deficits now is because they are coming in the context of declining national savings. That is, they are substituting for our own funding rather than coming in in addition to our own funding because we have such productive opportunities.

Senator BRADLEY. Well, I think that if the political process could understand this fact, we would have made a major step forward in dealing with our current economic circumstance which is inextricably embedded in the world's economy. And, increasingly, the future depends on that growth. That is why the point that Dr. Steuerle made, which is about the other countries of the world dissaving is such a startling fact, would you not agree?

Dr. AUERBACH. Yes, I would.

Dr. STEUERLE. Senator, could I just add something? I did not include this in my testimony. I looked up a number on net foreign assets held by Americans. Let me use flow of funds accounts, which contain some question on the value of direct investment abroad. Let me add that caveat. But if you accept these figures, in 1981 we had net foreign assets of a positive \$312 billion.

By the end of 1993 we had minus \$653 billion. That is a swing of close to a trillion dollars in terms of our net worth essentially transferred abroad. It translates to roughly about \$10,000 per household we have now shipped abroad and on which we have to pay foreigners future interest.

If you want to emphasize the extent to which this dissaving by the government or dissaving by the private sector is affecting us, another way to demonstrate it is simply to show the extent to which our assets, our net worth, is really shifting abroad as opposed to remaining at home.

Senator BRADLEY. As we invest more abroad?

Dr. STEUERLE. Well, this is not investing more abroad. This is the extent to which foreigners have invested in the United States. We used to have a positive balance of over \$300 billion. We now have a negative balance of over \$600 million.

Senator BRADLEY. The figure that strikes me as the most startling is the 82 percent figure. But there is another figure in the hearing and that is yours, Dr. Steuerle, on essentially the insurance value of Social Security. If you could explain that a little bit. What do you mean by insurance value? How much of the increase is due to longer life? How much of it stems from increasing health care costs? And again, the point is, you stated in your testimony

that if you were going to—the present value of insuring somebody so that it gets Social Security stream of payments would be \$800,000—\$469,000 now. Is that right?

Dr. STEUERLE. That is correct, Senator, a little less than half a million dollars now in terms of insurance value. It moves up over time. This is just for an average wage couple. It is a little more for an average wage two-earner couple. It moves up toward \$800,000 as you move towards 2030—that is under existing Social Security benefit formulas.

What is that? That is insurance value. And what is insurance value?

Dr. STEUERLE. Insurance value is essentially the sum of all of the benefits that are promised to this couple retiring at age 65, not just for this year but for all future years until they are expected to die. The evaluation takes into account the probability of death. It is for an average couple and averages in both the couple that lives to 90 and the couple that lives to 66.

Senator BRADLEY. And if you retired, if you reached 65, for example, in 1960 you would anticipate receiving \$144,000 in benefits; is that what that says?

Dr. STEUERLE. That is correct. If you went to an insurance company and said, I want an insurance policy that is going to give me the same level of cash benefits as provided by Social Security—in 1960 there was no Medicare—that insurance company would come back, assuming a 2 percent real interest rate on your savings.

Senator BRADLEY. Right.

Dr. STEUERLE. That insurance company would come back and say, well, we will sell you this policy for \$144,000.

Senator BRADLEY. Yes. And that would guarantee you, what, \$144,000?

Dr. STEUERLE. For the \$144,000 you would be guaranteed the stream of about \$9,000 some odd dollars in benefits annually for ever year until you died.

Senator BRADLEY. What would be the total of that stream?

Dr. STEUERLE. Well, the \$144,000 uses a discount rate. The cost or value is actually more than \$144,000 if I do not take into account the interest on this money.

Senator BRADLEY. And now if you did that it would be \$469,000?

Dr. STEUERLE. That is correct, about half of which is due to cash benefits and about half of which is now due to Medicare, assuming the continued significant increase in Medicare costs that are in the trustee's reports.

Senator BRADLEY. So that is really comparing apples and oranges then, because it is Medicare and cash benefit. But if you just did the cash benefit it would be \$230,000?

Dr. STEUERLE. I believe that is about right.

Senator BRADLEY. Versus \$144,000. So even that has gone up.

Dr. STEUERLE. My point, Senator, is simply that if we would look at what we are providing to individuals at point of retirement, think about our Social Security system, and then decide how we wanted to allocate that money, we might be able to come up with a fairly generous and good retirement system.

But, in fact, the way the benefit formulas work essentially we have let the system run according to decisions that were made long

ago in the past. Among the decisions were a constant retirement age. One reason the cost is so high is people live long—people who retire at 62 now, for instance, live on average 20 years in retirement. If you take into account the fact that they get survivor's benefits, their pensions last 25 years on average in retirement.

It takes a lot of private saving or public saving to be able to generate 20 or 25 years worth of retirement support. We do not just do that for cash benefits, we now do it for health care. On the health care side, we have decided not simply to provide some modest level of an insurance policy. We have essentially said to the private sector—to the doctors and citizens—you decide how much is health care. You decide what is important. You decide when the operations are necessary. You decide what treatment you want and what is best.

And we, the public sector, the taxpayers, will pay for it.

Senator BRADLEY. Send us the bill.

Dr. STEUERLE. So we have lost control over how these programs are indexed, both in terms of lifetime longevity and in terms of the cost of health care. If we would take the system back under control and decide year to year what insurance value we want to provide under Medicare and Social Security, decide that is what we are going to provide, I think we would have a system more under control and we would solve a lot of the problems that you have been discussing with Dr. Auerbach in terms of the cost of the system is driven up in the future. But future budgetary problems are largely driven by Social Security and Medicare costs.

Senator BRADLEY. Your \$800,000 by the year 2030 would that not just bankrupt the Federal budget?

Dr. STEUERLE. That is right. Another way of putting this is the following: as we move out toward 2030, if revenues stay about the same percent of GDP and all other Federal spendings stay about the same percent, the deficit rises from about 2 percent towards 8, 9, 10 percent of GDP, which is, of course, an unsustainable number.

Senator BRADLEY. When you say unsustainable you mean what?

Dr. STEUERLE. I do not know who is going to provide the borrowing. I do not think foreigners are going to provide borrowing of that amount.

Senator BRADLEY. So unsustainable is another word for bankrupt?

Dr. STEUERLE. That is correct.

Senator BRADLEY. Because nobody would lend you the money to finance the deficit and you could not increase the taxes sufficient to pay the debt?

Dr. STEUERLE. That is correct. In the more narrow accounting we do in Social Security, the trust funds themselves will not have the money to make payments.

Senator BRADLEY. And this is simply taking a look at one aspect of the budget, right?

Dr. STEUERLE. That is correct, Senator. At the end of the 1990's, if we look at the current budget, about 50 percent of Federal expenditures is spent on retirement, health and disability. The other 50 percent is spent on everything else, including interest on the debt, defense and what we usually think of as government—trans-

portation, education and so on. A large portion of the budget that is indexed beyond our control is in the retirement and health areas.

Senator BRADLEY. A number of the panelists today have suggested that the recent savings drops have occurred among the older Americans rather than among younger Americans. What does that portend for future savings rates?

Dr. STEUERLE. Well, traditionally it is nearer to older age when individuals start saving for retirement. So again, the drop has some implications for how much saving will be available later in retirement.

I think the other aspect of this is, Senator, that we have been pushing on to our younger generations—even independently of the tax rates that Dr. Auerbach has been talking about—more and more obligations, while placing less and less onto older generations. And it is in part because we are allowing people to retire earlier. We are allowing more health benefits.

As we have these gains as a society—longer lives, better health—we are taking those gains and we are essentially distributing them mainly to older individuals. And on top of that we are saying to younger individuals, well, to help pay for this, and more subsidized health benefits, we are going to even extract more from you. Not just in terms of private savings but even more in terms of things like Social Security tax rates.

So we keep pushing harder and harder on younger generations to come up with the funds necessary to support what society is doing.

Senator BRADLEY. Mr. Salisbury notes that we have to a large extent relied on employer-based savings programs as vehicles for retirement income. For such voluntary programs it has largely been tax incentives that have been relied upon to encourage companies to offer them and individuals to sign up. Do you think that this is no longer workable?

Mr. SALISBURY. Well, it seems to be working at fairly high dollar rates. The money is going in. The issue is at what pace the money is coming out. I noted the statistics on relatively high mobility of the work force as far back as we can see. The BLS data document that we have actually seen some slight increases in median job tenure, rather than the press notion of everything getting shorter. The system has worked to date and there is no reason to believe that it will not work in the future.

I think the issue that creates the biggest economic question is that of our objective. Is it retirement income savings as opposed to short term savings. That is, savings that may or may not last for a long period of time. The issue is what happens to the dollars once they have gone in and then flowed out: the lump sum distributions.

The evidence is that much of that money is not being preserved. If the objective is purely a savings objective, that is not necessarily bad. If the objective is, in fact, related to capital being there when individuals retire, then at least we are on to a different conclusion.

The changes made in 1974 and 1986 which reduced the period for vesting, and other changes, plus in 1978 the introduction of 401(k) clearly has taken a much broader segment of the American population and given them opportunities to build capital in these

programs. The evidence is that they are taking advantage of those opportunities.

Senator BRADLEY. And the Federal employees example is only one of the examples?

Mr. SALISBURY. The Federal employees example is a good one.

Senator BRADLEY. Which means Federal employees went from what? What was the number? Went from 20 to 40 percent or something like that?

Mr. SALISBURY. Correct. Federal employees also moved to a defined benefit and defined contribution plan. The defined benefit plan went from about a 2.5 percent per year of service formula, to 1.5, plus the defined contribution program.

If one looks at the majority of Federal employees, they will actually get more dollars out of that defined contribution program than out of the defined benefit program because so many people that come to work for the Federal Government do not remain with the Federal Government for long periods of time.

Senator BRADLEY. Now the lump sum payment that you made is to me—it is worrying to me from the standpoint of individual worker security. Do you have the number for the amount of lump sum payments last year?

Mr. SALISBURY. We do not. The Internal Revenue Service was asked to do updates by us of that data post-1990 and they have told us that even though we were willing to pay for it that they did not have the resources to do so.

Senator BRADLEY. Really? Well, maybe they will if we request that.

Mr. SALISBURY. I encourage you to do so.

Senator BRADLEY. In other words, we do not know the amount of lump sum?

Mr. SALISBURY. We do not know the amount for 1991, 1992, or 1993. We have no information.

Senator BRADLEY. In terms of total dollars or in terms of numbers of workers?

Mr. SALISBURY. We do not have either piece of information.

Senator BRADLEY. And do you have it for 1990?

Mr. SALISBURY. We do have it for 1990. For 1990 the total value of lump sum distributions was just above \$126 billion. That was paid to approximately 10 million individuals.

Senator BRADLEY. Do you believe that in 1991, 1992, 1993 it would be more?

Mr. SALISBURY. Based on the trends we have for 1987 through 1990 there is every reason to believe that that continued growing. Both in the number of individuals, and probably about a 10 percent per year growth in the dollar value of those distributions.

Senator BRADLEY. So you have—just take 1990—10 million people who had pensions that were there ready to take care of them in retirement, but for whatever reason, maybe they had a cash crisis, maybe they bought a new house, maybe they wanted to send their children to college, whatever, decided to take a lump sum payment instead of their pension and they got X amount of dollars—\$150,000, \$200,000. I do not know what the amounts would be. But the total came to \$125 billion.

Mr. SALISBURY. Correct.

Senator BRADLEY. And 10 million people who now no longer have a pension, they have the money.

Mr. SALISBURY. Well, 27 percent of those people did roll over the lump sum distribution.

Senator BRADLEY. 27 percent?

Mr. SALISBURY. Correct.

Senator BRADLEY. So you have 7.5 million people who no longer have a pension?

Mr. SALISBURY. Correct. I would throw in one caveat. Many of those individuals getting those lump sum distributions may have only been getting a check of \$1,000 or \$3,000 or \$5,000. So part of the issue may well be the absence of economic education. People do not understand that they are going to hold five or more jobs and if they take that check each time they change jobs, roll it over and keep it invested, then a small sum of money can become quite a bit of money by the time they hit age 65.

The individuals who receive lump sum distributions above about \$20,000 have a very high probability of rolling that over and saving it. The lower the dollar value of the distribution, the higher the likelihood they will take it into income.

The problem with that in the long term is that people getting those small distributions who are actually at a place in the income scale where in the long term they would get the greatest value, as a compliment to Social Security, by preserving those dollars.

Senator BRADLEY. What percent of the 10 million people do you think fit into this category?

Mr. SALISBURY. Into that lower category, from a rough cut of the data, about 70 percent.

Senator BRADLEY. So you have about 7 million people in 1990.

Mr. SALISBURY. Correct.

Senator BRADLEY. So essentially, those who got their lump sum and spent it, now no longer have a pension right and no longer have the money.

Mr. SALISBURY. And who may go to work for a new employer and begin building up a pension right again, who may then go through the same process again. Very frequently there has been a statement that this is a defined contribution plan phenomenon and not a defined benefit plan phenomenon. Whereas, about 40 percent of defined benefit pension plans now also pay their benefits with a lump sum distribution option. That is increasingly the option being used in major corporate plans. Where the lump sum option is provided, approximately 90 percent of those given the ability to take a lump sum instead of an annuity do so.

This is not—as is frequently stated—a defined benefit plan versus a defined contribution plan issue. It is no longer that. It is more readily simply an issue of should lump sum distributions be available to be taken into taxable income or should they be preserved in some way so that they will eventually provide retirement income.

Senator BRADLEY. I think, frankly, that is a very relevant question. Do you have opinions on this, either one of you, Dr. Steuerle or Auerbach? I realize this does not have a—

Dr. STEUERLE. Senator, as I mentioned in my testimony I am quite worried about the early withdraws from pension plans also,

particularly because of concern that not only do people not have adequate money in private retirement, but in fact that they are going to then rely more upon the Federal sector to support them for things like long-term care and nursing homes. So there are implications of what the government has to come up with.

If I could interject a side comment here, Senator.

Senator BRADLEY. Sure.

Dr. STEUERLE. If you are interested in following through with the IRS on this issue of withdrawals, there are many more issues related to the ability of the IRS to develop statistics that are there, including a lot of other pension data that I know Mr. Salisbury is interested in.

I could include such issues as to doctor's salaries for health care reform, the amount of cheating on the earned income credit, capital gains, what is going on in the derivatives markets.

Senator BRADLEY. Slow down. Slow down. Say what?

Dr. STEUERLE. It is somewhat a side issue to the topic today. I am saying there are a lot of statistics that are essentially filed by taxpayers that are not developed by the IRS. For budgetary reasons, appropriations, and a lot of other complex reasons, they have not been able to develop this data.

If you are interested, I would encourage you to investigate the broader topic as well.

Senator BRADLEY. Yes. I would suggest that you submit to the committee the list of questions that you think and the statistics that you think would be most important to obtain.

[The data requested follows:]

When taxpayers file returns with the Internal Revenue Service, they pay a significant cost in gathering and providing information on their age, socio-economic status, and income. Administrative data can be contrasted with survey data such as the U.S. Census, where a large share of additional cost must be spent to gather the data. In the case of the IRS and certain other administrative agencies, the cost of collection is already paid (by the taxpayer). Thus, it is often much cheaper to make use of these data already collected than to pay sums for additional surveys.

The IRS Statistics Division sits in an unusual position. It rests within the IRS so that adequate safeguards can be set up to protect confidentiality and because the tax data must be processed for collection and enforcement purposes as well. But the Division is a stepchild in an agency mainly concerned with tax administration. The Treasury Department uses its leverage to emphasize the retention of data for tax policy purposes, even when there are no technical issues of tax administration. The Bureau of Economic Analysis tries to use some leverage of its own since it is heavily dependent upon IRS data for generating estimates of national income and product.

In my remarks before the subcommittee, I gave several examples of data that could be developed, but have been neglected so far. I include those here, along with several others.

- IRS data on income could give us a much more reliable figure on salaries of doctors—an issue that came up in health reform—but the occupation of taxpayers has only recently been coded and information will not be available for some time.
- A better design of compliance samples—an issue for that stretches beyond the Statistics Division—would have allowed us to delineate sources of error in filing for the Earned Income Tax Credit.
- The Statistics Division has been gathering information on capital gains and losses by asset type, as well as building up panels of taxpayers over time. These studies, however, are not always linked or documented thoroughly, and little money is available to make use of these files, whether by Treasury, the Securities and Exchange Commission, or other researchers. This weakens our ability, for instance, to understand more thoroughly what is going on in commodities futures and derivatives markets.
- Corporate panel data following firms over time still need to be more fully developed and documented.

- IRS, I understand, is contemplating a further processing of exempt organization return data, but to date the work has been quite incomplete. Meanwhile, of course, Congress is considering drafting legislation on the basis of information that could have been more complete.
- For years forms filed by pension plans have not been analyzed, although here primary responsibility rests with the Labor Department.

What makes the issue complex are cross-cutting constraints in the government. It is very difficult to decide, for instance, to spend more on the development of an IRS statistics file at the cost, say, of a smaller sample size for some Census survey. In some cases—as in the examples of lifetime taxes and benefits in Social Security in my testimony—better output requires better coordination, and the ability to transfer data back and forth, among agencies. For a lot of programs over which the Senate Finance Committee has jurisdiction, a crucial dearth is the absence of files that combine together administrative records on transfers received and paid, e.g., from welfare programs and income taxes.

In the case mentioned by Mr. Salisbury, the IRS is constrained by attempts to limit number of personnel—regardless of budget. Thus, under existing constraints on number of personnel in government (independently from their cost), Mr. Salisbury's request would put aside other important work even if he could come up with the funds to compensate the government. Another personnel issue is that statistics and research are given low ranking within the IRS relative to other statistical agencies; for example, there is only one Senior Executive Service (SES) slot at IRS Statistics. Meanwhile, computer equipment at IRS is antiquated, thus reducing its ability to hire computer experts who want to keep up with the state of the art. Personnel policies here also tend to leave government non-competitive with private enterprise in bidding for computer science graduates. The quality of work suffers as a consequence of these various management and personnel problems, many of which are determined outside of the IRS.

Still another problem is internal to IRS: much of the data on exempt organizations and pensions is incompletely or inaccurately filed; coordination is required between those branches that could require more complete filing and the statistics experts who must analyze the data.

In summary, there is always a demand for more research; I do not wish to imply that it is always cost effective. Given the large cost already paid by taxpayers in filing information, it is my belief that resources spent developing, documenting, and using tax data are well spent. Even additional resources, however, are not enough if other constraints, such as on number of slots, cannot be addressed.

Senator BRADLEY. Dr. Auerbach, do you have anything?

Dr. AUERBACH. It occurs to me as we are talking about lump sum distributions that these issues come up in other contexts too. There has been a tension on such things as individual retirement accounts, to allow expansions of withdrawals—first time home buyers, medical emergencies and so forth.

If one looked at why people are taking lump sum distributions, undoubtedly one could find a number of apparently worthy expenditures that people are making. It always seems like a good idea to allow people to withdraw funds to do that. So I think it is, in general, a problem. But not just a problem with pensions, but with such things as individual retirement accounts.

Part of the problem is we have a little bit of schizophrenia in terms of what we intend. If we intend for people to be providing retirement income, then presumably we should make it as difficult as possible for them to put money away in tax-favored forms and then decide that they really did not want to put it away for retirement income.

Senator BRADLEY. Do you agree with that, Dr. Steuerle?

Dr. STEUERLE. Yes.

Senator BRADLEY. And do you agree with that, Mr. Salisbury?

Mr. SALISBURY. I think setting the goals and then matching the policy to the goals is extraordinarily needed and important.

Senator BRADLEY. But this particular policy recommendation?

Mr. SALISBURY. I think the dollar magnitude in this area is sufficient, vis-a-vis retirement income. It is one that should be dealt with sooner rather than later, yes.

Senator BRADLEY. Do all of you favor the 401(k)s? Do any of you favor the 401(k)s?

Mr. SALISBURY. I have a 401(k) and I personally love it.

Senator BRADLEY. In terms of policy.

Dr. AUERBACH. The question is compared to what. You are spending tax dollars on 401(k)s and other savings vehicles. And if the issue is, do we think that there are people who are saving more through 401(k)s more than they otherwise would, the answer is probably yes. It is costing the government money and the question is what you would be doing with the money if you were not—if the government were devoting that money to reducing the deficit, that might even have a more salutary affect on national saving. But if we are devoting the money to another element of current consumption or expansion of entitlement benefits, then it obviously would not.

Mr. SALISBURY. A personal statement, yes, I think 401(k) plans and defined contribution programs serve an extraordinarily useful purpose.

First, they begin to cause individuals to think about savings and the necessity of savings.

Second, if we look at the data on the proportion of individuals who have been solely reliant on Social Security in recent decades and, with the data others have presented here on the necessity for Social Security to provide less in the long-term, then definitionally individual responsibility is going to be more necessary. Providing individuals with a structured way to save, as 401(k) plan and other defined contribution plans do, starts to build a basis for that individual responsibility.

Third, if we look at it in terms of the labor force and the fact that the labor force has always been highly mobile—this is not just a new phenomenon—individuals can far more readily over a life time build for retirement through something like a 401(k) plan than they can through a traditional defined benefit pension plan. Most particularly, as the Federal Government has done, with a concern by employers, public and private, that they are not going to be able to provide as much in the future through a defined benefit program. They are attempting to get individuals to focus on individual responsibility. The defined contribution programs do allow for many things to be achieved.

The asset build up is impressive, considering that 401(k) programs have only been in existence since the early 1980's. We have seen participation grow dramatically. We have seen assets grow to where now approximately \$600 billion has been accumulated in these programs. If something were to be done vis-a-vis preservation, then we would end up seeing these programs have greater asset values. More assets than the entire system of defined benefit pension plans by about 1997, without preservation, and with preservation that would happen even more quickly.

Senator BRADLEY. By preservation you mean?

Mr. SALISBURY. Lump sum distributions being rolled over as one moves from company to company rather than being taken out of the system.

Senator BRADLEY. And there needs to be a rule prohibiting that.

Mr. SALISBURY. If one wants preservation, yes. Whether one does it through negative or positive approaches. One could add to the rules put into the Unemployment Act of 1993 which provided for direct trustee-to-trustee transfers in these situations. You could simply say the obligation of the retirement income plan is to do a direct trustee-to-trustee transfer.

So you are not denying the individual, if you will, the ability to take it into income. They never get the lump sum distribution. It just keeps flowing through the system between individual retirement plans and 401(k) plans.

Per Dr. Auerbach's statement, there may be reasons to not do that in terms of housing policy, education policy and other things. It is goal based. If the goal is retirement income from these programs then preservation is merited. \$53 billion would have been in retirement savings in 1991 that was not there because of money taken into income prior to age 59.5, and from 1987 to 1990 that is \$187 billion.

If one takes the average age of those individuals and adds 10, 20 and 30 years worth of compound interest, that is a significant amount of additional capital accumulation.

Senator BRADLEY. So that amount drained out of the pension system essentially.

Mr. SALISBURY. In essence, yes.

Senator BRADLEY. Into consumption. So where did you get that 1991 figure?

Mr. SALISBURY. The 1991 figure is the additional savings that would be there if all lump sum distributions had been preserved.

Senator BRADLEY. Where did you get it?

Mr. SALISBURY. Pardon? The 1990 figure.

Senator BRADLEY. Oh, 1990. Oh, okay.

Dr. STEUERLE. Senator, can I raise a couple other problems of 401(k) plans?

Senator BRADLEY. Sure.

Dr. STEUERLE. One, it is not clear that 401(k) plans are getting down to the bottom half of the income distribution.

Senator BRADLEY. Nondiscrimination clauses do not work?

Dr. STEUERLE. It is partly that. It is partly that the more we seem to rely upon individual contributions rather than the contributions by the employer, the less likely it is that many middle- and lower-income employees will contribute to the plans.

I am not opposed, by the way, to defined contribution plans. I think they have a lot of benefits such as portability and indirect indexation for inflation. But 401(k) plans, depending on the matching formula, may be very highly concentrated among upper and upper-middle income taxpayers.

A second problem it seems to me is that we have so many rules with respect to defined contribution plans that it is hard for anyone to really be able to figure them out. We have not only 401(k) plans, but we have the 403(B) plans that are allowed mainly for people at universities and private research institutions like my own. We

have certain forms of profit-sharing plans and stock bonus plans. We have Keogh plans which often then are set up as stock bonus and profit-sharing plans with money divided between them. We have IRA accounts. We have ESOP plans. For each of these we have different rules for what can be put in and what can be withdrawn and when it can be withdrawn. It is a very complex and hard to understand system.

Senator BRADLEY. It is like the Tax Code almost. Almost like the Tax Code.

Dr. STEUERLE. That is right, Senator.

Senator BRADLEY. Could I ask, just following up on Dr. Steuerle, if this true about the 401(k)s and others are used by an upper income strata, what is the best vehicle to ensure savings at the lower to middle income strata?

Dr. STEUERLE. Senator, now you are facing what I consider to be a fundamental policy dilemma. If lower and middle income people do not typically save much for retirement, perhaps because they are saving the form of housing, perhaps because they are just typically nonsavers, then we face directly the issue of whether we need to provide for their retirement, either (a) by setting a higher level of minimum benefit in Social Security, or (b) by mandating private saving. In the latter case individuals have to contribute some minimum of X percent of pay to retirement plans.

As a society, we have not been willing to go the mandated private route, that is, mandating people to put money into a private plan. We have been willing to go the route of mandating people to put money in a pay-as-you-go public system that does not generate saving. I think that is the dilemma we face. It seems to me those are the two routes that have to be considered.

Mr. SALISBURY. Senator, what I wanted to add is, one of the issues is the age of data. If we look at the 401(k) data collected by the Census Bureau for 1983 and 1988, then the point that Dr. Steuerle makes is very clear. If we look at data which was just released in the last three weeks by the Census Bureau which was collected in April of 1993, the participation rate in 401(k) plans had grown to 67 percent. We find that it has spread far more evenly across the income spectrum than it was as recently as 1988.

Senator BRADLEY. So what is the minimum participation in a 401(k)?

Mr. SALISBURY. I am not sure what you mean by minimum.

Senator BRADLEY. What is the minimum you can put away?

Mr. SALISBURY. Most employers would allow the individual through voluntary contributions to make an allocation of anything above 1 percent of salary.

Senator BRADLEY. One percent of salary.

Mr. SALISBURY. Now to Dr. Steuerle's second point. Each of the last 5 years in one of our annual Gallop surveys we have asked the public about whether or not they would favor a requirement that, through salary reduction, they put away 5 percent of their salary each year into an account that would not be available until retirement? Each of those 5 years between 82 and 87 percent of the public have said yes, I would have favor the government making me do that.

And in follow-up questions when asked, "Well, why do you think you should be made to do it?" it ends up showing that people readily understand themselves, that "If I am not made to do it, I will not do it." I will not put the priority on it.

The example most frequently given is a Christmas Club account.

Senator BRADLEY. Yes, right. 82 to 87 percent of all income levels?

Mr. SALISBURY. All income levels.

Senator BRADLEY. Want the government to force them to save what percent?

Mr. SALISBURY. 5 percent.

Senator BRADLEY. 5 percent. What do you think of that, Dr. Auerbach?

Dr. AUERBACH. Well, when Christmas Clubs were around, I always thought I would like to get a piece of the action.

Senator BRADLEY. Let me ask each of you just one or two more questions. Then we have to wrap up. Each of you have talked about the drain on savings and on retirement security that come from increasing health care costs. It is just Pac Man eating up everybody's future. The question is: What do you think is the best way to control those health care costs?

Obviously, some of you have testified before when we were dealing with health care. But here we have the phenomenon of health care costs accelerating at a pace that it simply eats up our future and we have to get it under control. What do you think is the best way to do it, given the time, say, in the next 5 to 10 years?

Dr. AUERBACH. Well, I think it would be presumptuous—

Senator BRADLEY. Say the next 5 years. I do not want to give you the 10-year opportunity.

Dr. AUERBACH. Try to change incentives to a certain extent. It is hard to know how successful any policy will be. But certainly a policy that does not include limitations on the tax favoritism toward health care benefits and some strong encouragement for individuals to take measures to respond to market incentives and to take measures to conserve on health care expenditures is bound to fail, particularly in the context where, in general, a health care provision is being increased. Without significant changes in the incentives for people in health care markets have to conserve on expenditures, I don't think it is going to work.

Senator BRADLEY. What is the matter with just putting controls on, saying you cannot spend more than X?

Dr. AUERBACH. Good luck.

Senator BRADLEY. I understand.

Dr. AUERBACH. I do not think it will work any better in the health care market than it has worked in any other market.

Senator BRADLEY. And what happens? Why does it not work?

Dr. AUERBACH. Except in wartime where there is a general feeling that it is being done for the national good, and that it would somehow be treason to violate, people generally follow market incentives a lot more strongly than government dictates.

We have observed it in the cases of Medicaid, for example, that when payments have gone down, service quality has gone down. The only difference, I suppose, is that care has shifted to other uncontrolled sectors. Once you attempt to control everything, the

quality of medical care will go down as well, and people will devise ways of getting around the controls. This is another thing that always happens in the face of controls.

So we will have some combination of inefficiency in the way markets provide things in order to get around the controls, as well as an erosion of quality. This, presumably, is something people want to avoid.

Senator BRADLEY. Dr. Steuerle?

Dr. STEUERLE. Senator, I think what is called for in the social welfare arena is nothing less than what you were fundamentally instrumental in achieving in the tax area. I just like fundamental tax reform, I think we need something that I might call fundamental social welfare reform. I think we need to put before the public the broad tradeoffs that are available to it. We do not want to talk about cutting back on health care by itself, but cutting back on health care growth in exchange for something else.

Perhaps care for our children; Among the elderly, perhaps increased cash benefits, or higher minimum cash benefits in exchange for less growth in health. But we must make explicit the tradeoff. I know that is what is being attempted partially in health reform, but the tradeoffs are still hidden, the cost of health care is still hidden. One of the reasons why we are having difficulty achieving health reform is that we have not moved beyond health. We are only trying to make the tradeoffs in health.

Now more explicitly with health itself, I think that the design of Medicare and Medicaid are fundamentally flawed for reasons I expressed earlier. I do not think one can grant the private sector the opportunity to decide how much is going to be spent by the public sector. Existing programs are essentially open-ended.

Senator BRADLEY. But nobody is suggesting that in the various reforms.

Dr. STEUERLE. The closest thing I can see is whether we might be able gradually to provide the elderly some voucher for Medicare, require that it be spent on some sort of plan that has some community rating, at least among the elderly, so we do not have problems with people dropping out of the system through what is sometimes called adverse selection.

Then as we give the elderly a higher and higher level of voucher each year, they will realize that the government is giving them a higher real level of benefit—even if not growing at 5 or 6 or 7 percent real per year, but perhaps only a more modest rate of 1 or 2 percent.

That then forces the beneficiaries or the insurance companies that would be selling these community-rated policies to go out and bargain much more toughly with the medical service providers to say, we are only going to pay this much. We are only going to pay X. We are only going to pay Y. We can only afford so many \$300,000 or \$400,000 a year surgeons.

Today we have a crazy system. We have modest-income workers buying \$300,000 surgeons for modest-income elderly people. Some of the money is not going from payers to recipients but to support a fairly high salary structure for providers in-between.

I do not mean just to emphasize the doctors. I was on a plane recently, and an article compared the salaries of nurses relative to

engineers. The relative salaries of nurses had risen dramatically. Now I am not saying nurses do not necessarily deserve this money, but if one keeps putting more money in the system, the providers will find ways of extracting the money in ways that do not increase health benefits.

Senator BRADLEY. Well, what was the relative between nurses and engineers?

Dr. STEUERLE. Well, this was a very narrow comparison, I believe, a University of Delaware survey. I hope I have it correct. It started off with new engineering graduates earning about 20 percent more than nurses and by the time you got up in the early 1990's I think the nurses were earning as much as the engineers.

Senator BRADLEY. Mr. Salisbury?

Dr. STEUERLE. If you are not willing to go the voucher route, I am strongly of the belief that one should ratchet down the prices in Medicare more strongly. That is, I would be willing to make that move, even at the cost of the objections of the providers. I would try to take some of that money and spend it on increasing cash benefits in the short run.

My belief is Medicare cost controls have not really been adequate to this point in terms of ratcheting down the prices.

Senator BRADLEY. Would you like to see price controls as a way to do this?

Dr. STEUERLE. Senator, to expand on Dr. Auerbach's statement, I do not think one can exert controls over the private sector in ways that will work. We then lose all signals as to what we want in the future in the way of medical care. However, the government is obligated to have controls over what it spends.

So the question of price controls is a little bit ambiguous since the government now has half the health care market. It does have to exert price controls over what it spends.

Senator BRADLEY. We have premium caps under the present system or proposed reform.

Dr. STEUERLE. Senator, to give you an example, premium caps at first sound simple. It sounds like we are just going to control one set of prices in the economy. But, in fact, all prices are relative.

The price of this premium is relative to that premium. I gave an example in a column I wrote recently. Let us suppose that the State of New Jersey spends twice as much per capita as the State of Kentucky on health care. That is either (a) because New Jersey residents are receiving twice as much health care; or (b) because New Jersey providers are making twice as much as Kentucky providers. I am simplifying my story.

If one now puts on a cap that says, "all health insurance costs, premium costs, are going to rise by the same percent," through the law we would be requiring that Kentucky doctors always earn half of what New Jersey doctors earn and that Kentucky residents always get half the number of MRIs that New Jersey residents get. That is what price controls do. That is the reason they are so difficult to maintain: we cannot maintain all of these relative price comparisons and justify them.

Senator BRADLEY. Mr. Salisbury, getting back to the original question.

Mr. SALISBURY. I would note, Senator, that Dr. Steuerle's example of what has happened in nurse's compensation is why my sister-in-law has been far happier as a nurse than my mother was during her 30 years of nursing, which ended in 1978. She would have liked the salary progression to occur earlier.

On the initial health cost question, from the work we have done, I would outline four points. One, making it possible for all individuals who want insurance to get insurance so that they can get preventive care and other things early.

Second, move as much as possible from fee-for-service medicine to capitated programs and managed care.

Third, move to front end high deductibles and co-payments tied, not to absolute dollars, but to a percentage of the individual's income. Individuals would become more cost conscious and more aware of the actual value in cost.

And fourth, move away the insulation of individuals knowing the cost of health care. That can be done with or without changing tax treatment, but it would need to be done through describing to individuals the full value of health insurance as if it was a reduction in salary, so they are forced to look at those full values.

Tied to the second question of price controls, the history seems to imply that they do not work. We need to get at cost at the individual level. They need to understand what they are actually spending and what medical care actually is going to cost. That seems, in the long term, a more likely way to have a system that will work.

Senator BRADLEY. Let me thank all three of you for taking the time to come before the committee today and offer your testimony. I personally found it extremely helpful. As I said, this will be the first of a whole series of hearings on economic growth and savings and pension-related matters.

I thank you for beginning in a terrific fashion and giving us really some helpful perspectives. Thank you very much.

[Whereupon, at 12:40 p.m., the hearing was adjourned.]

APPENDIX

ADDITIONAL MATERIAL SUBMITTED

PREPARED STATEMENT OF ALAN J. AUERBACH

Mr. Chairman and Members of the Subcommittee:

I am pleased to have the opportunity to give you my view of the current U.S. savings crisis. The opinions are my own and not necessarily those of any organization with which I am affiliated. It is useful to begin with a summary of the points I will make in my testimony.

1. The U.S. is experiencing a savings crisis, even for a traditionally low-saving country. By virtually any measure, the U.S. saving rate has fallen sharply in recent decades.

2. The decline in saving has occurred even as demographics and the distribution of income have changed in ways *favorable* to increased saving.

3. As the U.S. population continues to age and the baby boom generation reaches retirement, demographic factors will lead to further declines in the national saving rate.

4. Extrapolation based on current household saving patterns and the assumed continuation of current fiscal policy suggests that members of the baby boom generation will experience lower retirement living standards than one would predict on the basis of normal economic growth.

5. However, U.S. fiscal policy is clearly on an unsustainable path, in that the national debt will explode at a rate much faster than GDP unless there is a substantial reduction in expenditures or a substantial increase in revenues. The needed revision in fiscal policy is likely to have an adverse impact on the retirement living standards of the baby boom generation, unless there is a significant increase in household saving rates.

6. A low rate of national saving adversely affects U.S. international competitiveness. Only policies to increase national saving, and not policies aimed at influencing international trade, can influence the level of competitiveness for the nation as a whole.

RECENT U.S. SAVINGS RATES

Figure 1, appended to my testimony, presents the U.S. net national saving rates for the period 1960—1993. These rates are defined as the share of U.S. net national product (NNP) not devoted to government purchases or household consumption. As such, they understate the rate of saving to the extent that government purchases are devoted to investment expenditures. However, given the downward trend in the share of such expenditures, these numbers also understate the decline that has occurred in the national saving rate.

As the figure shows, the national saving rate was relatively stable at around 9 percent of NNP throughout the 1960s and 1970s. However, it fell sharply in the 1980s, and has continued to decline in the 1990s. For the past four years, the U.S. as a nation has saved just 2.53 percent of its national product in excess of that needed simply to cover depreciation of existing capital.

Why has the U.S. saving rate fallen since 1980? Because of the timing of the decline, many observers have blamed the fiscal policies of the 1980s, beginning with the Economic Recovery Tax Act of 1981. It is certainly true that federal government saving, as measured by the budget deficit, rose sharply during the 1980s, and this decline in federal saving has clearly contributed to the decline in national saving. However, there are several reasons why we must look beyond government behavior to explain the decline in national saving.

First, measuring the actual rate of government saving is difficult, because there are so many implicit government liabilities ignored by official statistics, such as promises to pay future Social Security benefits. Changes in these liabilities are not included in reported deficit calculations. For example, had the 1983 reductions in promised Social Security benefits been recorded as a reduction in the federal government's liabilities and a decline in household assets, this would have raised measured government saving and lowered measured household saving. Second, even the reported measures of government and private saving indicate that government was not alone in saving less in the 1980s. As Figure 2 at the end of my testimony shows, the U.S. personal saving rate fell by over one percentage point during the 1980s. Finally, the national saving rate continued to decline in the 1990s even as government deficits have declined as a share of NNP. Since 1987, the personal saving rate has never exceeded 5.3 percent of disposable income, a rate lower than the personal saving rate in any year during the previous three decades!

This decline in the personal saving rate is all the more remarkable because it has occurred as two other factors should have caused household saving to increase. First, the movement of the large baby boom generation into the peak saving years of middle age should have driven overall saving rates up at roughly the time that they began to decline. Second, to the extent that higher-income households save a higher fraction of their income than those of more modest means, the well-documented widening of the distribution of U.S. household income during the past two decades also should have caused the overall saving rate to rise.

Why household saving has fallen so much in spite of these factors is not entirely understood, but it does give us reason to be alarmed about what will happen when these factors are absent or are pushing in the opposite direction. In particular, when the baby boom generation reaches retirement and begins consuming its lifetime savings, we should expect a massive decline in the personal saving rate from its current level.

THE BABY BOOM GENERATION IN RETIREMENT

The low saving rates of recent years, combined with recent legislation raising tax rates and lowering prospective Social Security benefits, have disturbing implications for the baby boom generation as it nears retirement. In a recent study,¹ Laurence Kotlikoff of Boston University and I estimated the resources and living standards that individuals born between 1946 and 1964 will have when they reach retirement. Our base case calculations rely on two key assumptions: the continuation of current fiscal policy and the stability of the saving patterns of different age groups. That is, we estimate future standards of living under the assumptions that baby boomers will face the tax rates and entitlement programs dictated by current law, and will exhibit the same saving behavior as they age that recent generations have exhibited.

Our findings are sobering. Excluding expenditures on medical care, which are projected to rise quite rapidly, we estimate that the youngest baby boomers (those born in 1964) will be able to finance a standard of living at age 65 that is no higher than that enjoyed by individuals who turned 65 in 1992—despite nearly four decades of intervening economic growth. Older members of the baby boom generation are projected to fare somewhat better, in part because they had an opportunity to accumulate assets during a period of higher saving rates and lower tax rates than those now prevailing. Still, only the members of the very oldest baby-boom cohort—those born in 1946—are projected to be able to enjoy a retirement living standard that just keeps pace with economic growth. Moreover, these projections hinge on the assumption that the current fiscal policy remains in place—that baby boomers will see no further tax increases or government spending reductions in their lifetimes. Given the current state of fiscal policy, such an assumption is wildly optimistic.

THE U.S. FISCAL CRISIS

As members of this subcommittee are well aware, the U.S. federal government has run very large budget deficits since the early 1980s. However, both OMB and CBO currently project that deficits will decline for the next two fiscal years and remain well below current levels, as a percentage of GDP, for the remainder of the decade. This trend may appear to indicate that fiscal policy is on a sustainable path. Unfortunately, a closer look at longer-range projections reveals an underlying fiscal imbalance of truly massive proportions.

¹ *The United States' Fiscal and Saving Crises and their Implications for the Baby Boom Generation*, Report to Merrill Lynch and Co., Inc., February 1994.

The explanation for this apparent inconsistency lies largely in the U.S. demographic transition in which the aging of the baby boom cohort is playing a central role. At present, the OASDI portion of the Social Security system is running large annual surpluses on a cash-flow basis that reduce the reported budget deficit. However, early in the next century, the Social Security Administration projects that these cash-flow surpluses will turn into cash-flow deficits, adding to the deficits that result from other government operations. The swing from surplus to deficit in the OASDI program will, by itself, add over 2 percent of GDP to each year's budget deficit, without taking into account the associated interest cost.

Combining these OASDI figures with projections of the growth in Medicaid and Medicare spending, I estimated in a recent paper that the primary federal budget deficit—the deficit excluding interest—will grow during the first three decades of the next century by about 4 percent of GDP, or over \$250 billion annually in today's terms. Adding the interest on such accumulations leads to a projection of exploding overall deficits, with the national debt-GDP ratio rising from its current ratio of just over .5 to 1.31 by the end of 2030.²

If this policy scenario actually unfolds, the large national debt it produces will leave future generations with an enormous fiscal burden. The Auerbach-Kotlikoff study suggests that simply stabilizing the national debt as a share of GDP (not paying off the national debt), without imposing any of the fiscal burden on generations currently alive, would ultimately require a combined federal, state and local tax rate of 82 percent—net of entitlement benefits received—on the lifetime income of all future generations.

Some have misinterpreted this calculation as predicting that such tax rates actually will be observed; they are simply estimates of what tax rates would have to be in the future were no more immediate reforms undertaken. Indeed, the magnitude of hypothetical future tax rates makes reforms inevitable, although it is impossible to know exactly when or in what form reforms will occur. But it seems almost certain that some of the burden of the coming fiscal changes will fall on those in the baby boom generation.

Whether the changes come as reduced entitlements or increased taxes, they will further erode the standards of living that baby boomers can enjoy in retirement, given their projected saving behavior. Our simulations of a variety of fiscal policies aimed at equalizing the lifetime burdens on current and future generations suggest additional declines in living standards relative to our base case calculations. As measured by the feasible level of retirement consumption, we find that such fiscal policies will reduce living standards by between 7 and 29 percent for older baby boomers (those born in 1946) and between 10 and 40 percent for younger baby boomers (those born in 1964). For younger baby boomers, in particular, this sharp drop from an already low base presents a gloomy perspective.

In summary, there is a private aspect and a public aspect of the current savings crisis. Simply put, neither government nor households are saving enough. Households are not saving enough to provide themselves with an adequate retirement living standard. Government is accumulating explicit national debt and implicit entitlement program liabilities at a rate far in excess of the economy's rate of economic growth. But solving the government savings crisis will not, in itself, solve the national savings crisis. Indeed, through tax increases or cuts in entitlement programs, fiscal policy corrections will place even more pressure on households of the baby boom generation.

IMPLICATIONS FOR GROWTH AND COMPETITIVENESS

Competitiveness is a term with many definitions. To many, it relates to the successes of domestic industries in exporting abroad or fending off import penetration. Certainly, industrial policy can alter the relative performance of a particular industry in the international arena. However, for a nation as a whole, the balance of trade is determined by macroeconomic factors rather than the relative costs of particular industries. It is a fundamental national income accounting identity that the current account can be improved only by increasing national saving or reducing domestic investment. Clearly, reducing investment and increasing saving have different effects on a nation's well-being. It is this well-being, and not the balance of trade *per se*, with which we should be concerned. Hence, we should focus on national saving rather than trade in our analysis of international competitiveness.

From the national perspective, competitiveness ultimately means being able to enjoy a higher standard of living. All other things being equal, a higher rate of na-

²Alan J. Auerbach "The U.S. Fiscal Problem: Where We Are, How We Got Here and Where We're Going," National Bureau of Economic Research Working Paper No. 4709, April 1994.

tional saving translates into greater national wealth and hence a higher standard of living and competitiveness. The U.S. saving rate, which even in past decades was very low compared to the rates of other developed nations, represents an obstacle to maintaining a competitive international position. What can government do to attack this problem? Reducing its fiscal imbalance can help, for increasing government saving will act to increase national saving. But how government solves its fiscal imbalance will influence how much national saving increases.

POLICIES TO INCREASE NATIONAL SAVING

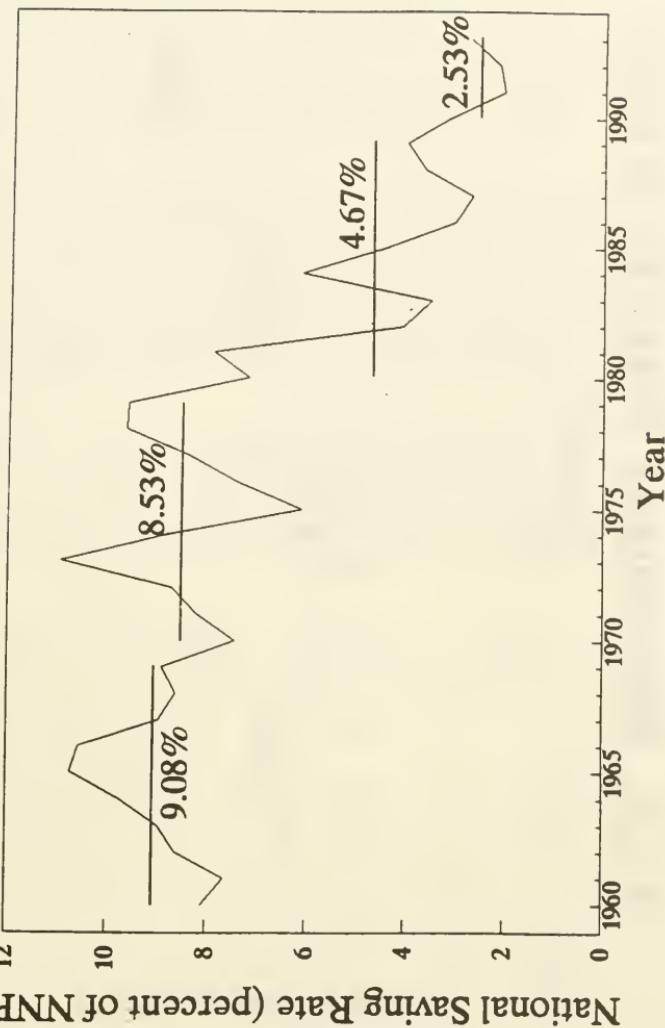
National saving is that part of a country's net national product not devoted to government consumption or private consumption. To raise national saving, given income, either government or private consumption must fall. One way of increasing national saving is to reduce government consumption directly. Such a policy is already in place, in the form of defense spending cuts and discretionary spending caps that reduce real spending each year.

Beyond directly reducing its own purchases, government can increase national saving only by reducing private consumption. This can happen in two ways. First, by reducing transfer payments or increasing taxes, government lowers the disposable income and purchasing power of households. Second, by altering the incentives of the tax-transfer system, government can change the willingness of households to save out of a given level of disposable income.

These two approaches are, of course, related. Increasing taxes on the return to saving, for example, has offsetting effects on consumption by reducing purchasing power but also reducing the incentive to save. Clearly, increasing capital income taxation is not the ideal way to encourage national saving. The objective of increasing saving would be better served by raising taxes on and/or reducing transfers to those with a high propensity to consume, and doing so in a way that does not reduce the incentive to save. But government has other objectives to weigh in its decisions, which is why it may choose not to increase national saving by cutting transfer payments to those most in need—who spend all of their disposable income on immediate consumption.

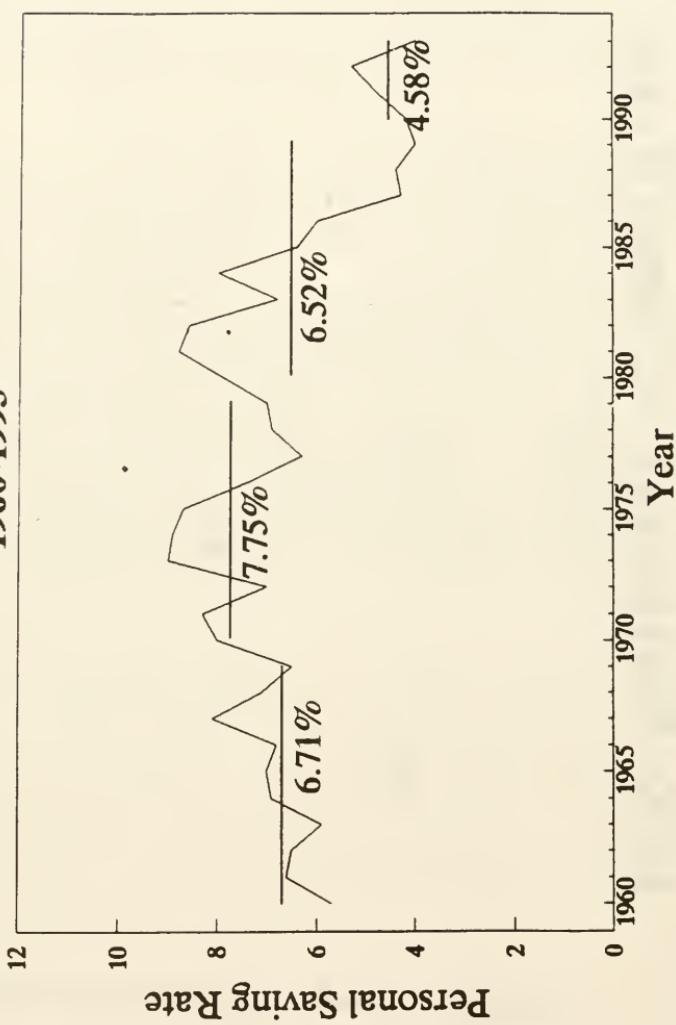
I believe that no single policy tool is large enough to reduce the government's fiscal imbalance and enhance national saving. While I would certainly not dismiss the importance of saving incentives in this process, the evidence on particular saving incentives, such as IRAs, is too uncertain and the size of the problem far too great to believe that saving incentives can bear much of the weight of solving the problem. It will take a combination of significant reductions in entitlement spending—even as significant increases in health care spending are being seriously considered—and judicious increases in taxes that do not discourage saving—such as consumption taxes—to stabilize fiscal policy and improve the rate of national saving. This is likely to make the problems of the baby boom generation in retirement more acute. But perhaps the example of increased financial responsibility that government sets will provide them with a lesson that influences their own saving behavior.

Figure 1
U.S. National Saving Rate
1960-1993



Alan J. Auerbach
June 17, 1994

Figure 2
U.S. Personal Saving Rate
1960-1993



Alan J. Auerbach
June 17, 1994

PREPARED STATEMENT OF SENATOR BILL BRADLEY

I would like to welcome all of our distinguished panelists and guests today. This is the first in a series of hearings we will hold in the Subcommittee on Deficits, Debt Management, and Long-Term Economic Growth that will focus on the absolutely critical issue of savings and retirement security. The topic of the hearing today is "The United States' Savings Crisis—Implications for Security and Long-Term Growth." Future hearings will try to disaggregate this issue into its component parts as well as discuss specific policy options. For today, however, I hope we can focus on the larger issue of whether there is truly a problem here that policymakers should be addressing.

The thrust of the hearing is to discuss the question of whether our nation is saving enough from two perspectives. The first is whether workers are saving enough currently to adequately provide for their retirement security. All too often we discuss the issue of savings in this institution without realizing that it has a human face. We frankly know that as a nation we do not save at the rates that other nations do, but what does that mean really for the family in New Jersey? What will that mean for the construction worker who shifts in and out different jobs and has no vested pension benefits? What will that mean for the software engineer whose only nest-egg is a defined contribution plan? What will it mean for the attorney with a family of four trying to send her kids to college and have enough left over for her golden years?

I have read recent reports that tell us that the Baby Boom generation is accumulating assets at a rate greater than their parents. How confident should we be in those figures? I have to admit that I see a number of troubling trends. I worry that today's generation will face much more of a challenge when they retire than their parents faced. We see personal savings rates dropping, pension coverage rates stagnating, and education and health care costs skyrocketing. We also are waiting longer to have children and living longer. I hope we can try today to move out of the ivory tower of economic theory and data and try to bring these issues back to their impact on real families.

The second focus for the hearing is whether we as a nation are saving enough to generate sufficiently large increases in productivity to maintain or improve on our standards of living. This larger macroeconomic issue obviously relates back to our first question. How much people need to save and how much they can save will obviously depend upon our economic health which in turn will depend on our national rates of savings and investment. If our fiscal house is not in order, it is our households that have reason to fear.

If investments are the engine of growth for the economy, then savings are the fuel. The question is whether we will have enough fuel to meet our goal. At a town meeting up in New Jersey this spring, a young man of about 25 stood up and asked me what he had to look forward to. I want to be able to tell that young man that our nation is on the right track, that we are still on a path toward prosperity.

Unfortunately, I also see a number of troubling trends on this larger issue. Our national savings rates are one-fifth of our economic competitors and one-fourth of what they used to be in this nation; even with last year's budget bill, deficits continue to plague our budget largely due to runaway health care costs; the Social Security Administration tells us that the trust funds will turn downward as early as 2013, at the same time as our pension system may become a net dissaver. At some point, the world will no longer sit idly by while we continue to pile on national debt and have personal savings rates of only 6.3%. The government will have to take action, and the longer we wait to do something, the more costly it will have to be.

Douglas MacArthur once stated "There is no security in this world, only opportunity." I hope that we here today take the opportunity to begin a renewed debate on our nation's savings policy.

PREPARED STATEMENT OF ROBERT D. REISCHAUER

Mr. Chairman and Members of the Subcommittee, I appreciate the opportunity to appear here today to discuss whether national saving is high enough to enhance future living standards and, within that context, whether saving by baby boomers is sufficient to allow them to meet their expectations in retirement.

The Congressional Budget Office (CBO) has advised the Congress for some time that the low rates of national saving that set in during the 1980s pose an increasing, cumulative threat to the growth of living standards for the people of the United States. CBO and other economists have done considerable research on the issues of how saving is best measured and how it contributes to future wealth, income, and

living standards. After hacking through a thicket of technical problems, we and other economists can see clearly that national saving is too low, no matter how it is measured, and that federal deficits contribute significantly to low saving. It is equally clear to us that reducing federal deficits offers the most reliable way to remove the threat that low national saving poses to the growth of living standards.

Because baby boomers loom so large in the population, many people express concern about whether the boomers are saving enough now and will accumulate enough savings to meet their expectations in retirement. It is definitely too early to say much with certainty about the financial well-being of the baby boomers in retirement. The evidence available suggests that, even though the average income of boomers in retirement will most likely surpass that of their parents, a large proportion of baby boomers may not be able to maintain their preretirement standard of living once they retire.

Popular wisdom hints that the baby boomers played a large role in the decline of national saving during the 1980s, but the evidence suggests that the baby boomers were not responsible for that decline. In fact, as the boomers enter their high-earning and high-saving years over the next decade or two, their saving could lead to a modest increase in the personal saving rate. Higher saving rates by the boomers in the near term would lead not only to more comfortable retirement for baby boomers but also to a higher standard of living for all Americans in the years ahead. If strong action were taken to reduce federal deficits as well, the outlook would appear much brighter.

THE NATIONAL SAVING RATE IS TOO LOW

The precipitous fall in the rate of national saving—from an average rate of 7.7 percent of gross domestic product (GDP) in the 35 years to 1980, to only 3 percent between 1981 and 1993, and to only 1.7 percent in 1993—is not without consequence. It has already imposed significant costs on the people of the United States, and until the decline is reversed, it will impose additional and even more significant costs on future generations.

National saving—that is, saving by individuals, businesses, and government—is the way a nation best provides for its future well-being. Through saving it finances the investment that adds to the stock of factories, machinery, and other types of capital that provide employment, increased productivity, and growing real income for more and more workers. From time to time, of course, national saving can fall short of investment, and inflows of saving from abroad can fill in temporary shortfalls. However, history has shown repeatedly that sustained growth in living standards is achieved most reliably through national saving. That was true for the United States during its ascendancy to world leadership and for Japan and the countries of Europe in their reemergence as industrial powers after World War II.

THE DECLINE IS NOT A FICTION

The startling size of the decline in the rate of national saving—from 7.1 percent in the 1970–1979 period to 3.8 percent in the 1980–1989 period—initially raised questions about whether something had gone awry with the way saving is conventionally measured in the national income and product accounts (NIPA). Should some spending that is counted as consumption in the NIPA measure—such as what is spent by consumers on durable goods, by government on capital goods, and by consumers and government on education, training, and research and development (R&D)—be counted as saving and investment? Was the decline exaggerated because the NIPA measure ignores the effects of inflation and capital gains? Was it overestimated because capital consumption—the depreciation of capital that reduces national saving—was overstated?

After evaluating these measurement issues, CBO has found that national saving still declined precipitously during the 1980s, no matter how it is measured.¹ For example, including adjustments for consumer durables, government nonmilitary investment, and capital gains only makes the decline worse. The drop in the saving rate between the 1970s and 1980s—3.3 percentage points for the NIPA measure—would be between 3.6 and 9.4 percentage points by measures that include these adjustments (see Table 1).

Including other expenditures on R&D, education, and training—which NIPA ignores in part because of the difficulty of estimating depreciation—would also make the decline worse. Taken together as a percentage of gross domestic product, these

¹ For details of the effects of the adjustments on national saving and a discussion of the issues, see Congressional Budget Office, *Assessing the Decline in the National Saving Rate* (April 1993).

expenditures also declined by about 1 percentage point between the 1970s and 1980s.

Finally, measures of depreciation that differ from what the NIPA methodology yields would not alter the story appreciably. Some research suggests that NIPA's estimate of depreciation might overstate depreciation and, consequently, underestimate saving. That could happen, for example, if capital goods last longer, or if the profile of depreciation over the assumed life of capital goods is different than the NIPA estimate of depreciation assumes. Based on the available evidence, however, CBO has determined that even under those circumstances the decline in national saving might be lessened by only about 0.6 percentage points.

TABLE 1. NATIONAL SAVING RATE ADJUSTED FOR CONSUMER DURABLES, GOVERNMENT NONMILITARY INVESTMENT, AND INFLATION-ADJUSTED REVALUATIONS

(In percent)

	1960-1969	1970-1979	1980-1989
National Saving Rate	8.0	7.1	3.8
Saving Rate Adjusted for Consumer Durables and Government Investment	11.5	9.9	5.9
Saving Rate Plus Capital Gains			
At replacement prices	10.7	12.9	3.5
At prices of existing assets	12.3	9.6	6.0

SOURCE: Congressional Budget Office, *Assessing the Decline in the National Saving Rate* (April 1993), p. 17.

NOTE: Replacement prices refers to the prices of newly produced investment goods. Prices of existing assets refers to valuing assets held by corporations at the market value of corporate equity.

HOW MUCH HAS THE DECLINE ALREADY COST?

The decline in the national saving rate has already cost the United States a lower level of income than it might otherwise have enjoyed. That loss in income is most immediately observable in the switch from net creditor to net debtor status with the rest of the world as the United States drew capital from abroad to finance its shortfall in national saving. But it is also observable in a lower capital stock than would otherwise have been the case, which in turn lowered potential output and income.

Economists at the Federal Reserve Bank of New York have made a good estimate of these capital and income costs. Using the standard, growth-accounting approach, which provides conservative estimates of the cost, they have calculated that by 1989 the decline in national saving had already reduced productive capital by 15 percent compared with what it could have been if the national rate of saving had not fallen from its level of the 1970s. That shortfall in productive capital reduced potential output in the United States by 5 percent annually, or about \$239 billion in 1987 dollars.²

One can only speculate how different the situation would be if higher amounts of capital and potential income were at the United States' disposal. Would rates of labor productivity and real wage growth be higher? Would achieving low inflation have come at less cost in terms of lower levels of unemployment?

HOW MUCH WILL THE DECLINE COST IN THE FUTURE?

If low rates of national saving continue, the United States can expect lower growth of productive potential and lower real income than would otherwise occur. Those costs will pose an increasing, cumulative threat to the growth of living standards for future generations.

There is general agreement that, by raising labor productivity, increased saving and investment will enhance future living standards, although the amount of enhancement is uncertain. The conservative, growth-accounting approach that is widely used considers separately the contributions to productive capacity of labor, capital, and total factor productivity (that is everything, including technical progress, that is not labor or capital but contributes to growth). The approach suggests that a permanent increase of 1 percentage point in national saving will raise living standards 50 years hence by about 1 percentage point.

²Ethan Harris and Charles Steindel, "The Decline in U.S. National Saving and Its Implications for Economic Growth," *Quarterly Review*, Federal Reserve Bank of New York, vol. 15, no. 3-4 (Winter 1991). The dollar amount is based on CBO's measure of potential output.

Alternative approaches, using what is termed "new growth theory," indicate that even higher increases in living standards may be possible. These approaches suggest that the contribution of capital could be larger than found through the growth-accounting approach, in part because of benefits that spill over from growing firms to the rest of the economy. Support for this view is provided by some historical studies that seem to show that investment in equipment might boost productivity more than investment in other types of capital.

Unfortunately, the new theories, though intriguing, do not yet have enough scientific support to base policy on them. The theoretical possibility of spill-over benefits lacks the empirical support that would be needed to merit much confidence in it. Moreover, the finding in historical studies that equipment spending gives a disproportionate boost to growth lacks theoretical underpinnings—that is, the finding could simply be spurious. Consequently, most economists believe it is prudent to stay with the results of the established growth-accounting approach, which has a long history of scientific support.

WHAT IS RESPONSIBLE FOR THE DECLINE IN SAVING?

The main cause of the decline in the national saving rate is rampant federal deficits after the 1970s. During the 1980–1993 period, when the rate of national saving declined by an average of 3.9 percentage points from its 1970–1979 average of 7.1 percent, federal deficits as a percentage of GDP rose by an average of 1.9 percentage points. Consequently, federal deficits accounted for about one-half of the decline between the 1970s and the 1980–1993 period.

Of course, just as issues have been raised about the proper measurement of national saving, similar and related issues have been raised about the proper measurement of the deficit's contribution to the decline in national saving. How culpable would the deficit be if measures of the deficit counted government expenditures on capital goods as saving rather than consumption? What would happen if they combined federal, state, and local budgets? What would happen if changes in the market value of federal debt were accounted for? And finally, what if the inflation portion of interest payments on the federal debt were credited to repayment of principal instead of charged to interest outlays? These adjustments might reduce the contribution of deficits to the decline in the national saving rate.

Each of these possible adjustments to the standard measure of the federal deficit has its proponents and critics, and I do not want to get bogged down in the endless arguments about their merits and demerits here. Nevertheless, after looking into these possible adjustments, CBO and most other economists have found that, taking them together (which is the only legitimate way to evaluate them), the federal deficit would become even more culpable. That is, federal deficits could be responsible for between one-half and two-thirds of the decline in the national saving rate, depending on how they are measured, with a reduction of private saving accounting for the rest of the decline (see Table 2).

The exact reasons for the decline in private saving are still an unresolved matter among economists. Some of the decline may simply reflect population trends: an increasing proportion of retirees, who tend to save at low rates, and a decreasing proportion of people ages 40 to 64, who tend to save at high rates. However, those trends were also in effect in the 1970s, before the decline in overall saving rates took place. Hence, they are unlikely to have played a major role. (Averaging 26.4 percent of the population in the 1960s, the number of those ages 40 to 64 fell by 0.8 percentage points in both the 1970s and 1980s. Averaging 9.5 percent of the population in the 1960s, the number of those ages 65 and older rose by 0.9 percentage points in the 1970s and by 1.2 points in the 1980s.)

Some of the decline in private saving rates seems to have stemmed from stock market and real estate gains. Feeling richer from gains in the value of stock market equity and real estate during the 1980s, households probably cashed in some of those gains by borrowing against their wealth and using the proceeds to finance consumption.³ That helped reduce saving.

³ For indirect evidence that increased access to second mortgages leads to reduced saving, see Joyce M. Manchester and James M. Poterba, "Second Mortgages and Household Saving," *Regional Science and Urban Economics* (May 1989), pp. 325–346.

TABLE 2. CONTRIBUTION OF GOVERNMENT AND PRIVATE SAVING TO THE DECLINE IN THE NATIONAL SAVING RATE

(In percent)

	1960-1969	1970-1979	1980-1989
National Saving Rate:			
NIPA	8.0	7.1	3.8
Adjusted	11.7	9.9	6.0
Federal Government Saving:			
NIPA	-0.2	-1.7	-3.6
Adjusted	0.7	-0.3	-2.5
State and Local Government Saving:			
NIPA	0	0.8	1.0
Adjusted	1.7	1.5	1.1
Total Government Saving:			
NIPA	-0.1	-0.9	-2.5
Adjusted	2.5	1.2	-1.4
Personal and Business Saving:			
NIPA	8.2	8.0	6.3
Adjusted	9.3	8.9	7.3

SOURCE: Congressional Budget Office, *Assessing the Decline in the National Saving Rate* (April 1993), p. xii.

NOTES: NIPA = national income and product accounts measure of saving.

Adjustments to NIPA include those for consumer durables, government nonmilitary investment, the inflation component of interest flows, and the market value of federal debt.

WHAT ROLE DOES THE DEMOGRAPHIC BULGE OF BABY BOOMERS PLAY IN THE DECLINE OF SAVING?

Some analysts argue that the profligate baby boomers are responsible for the recent drop in the rate of personal saving. In 1990, when the boomers were ages 25 to 44, they made up 44 percent of the population of the United States and were in the midst of the years when the lion's share of income typically goes for consumption. Low saving rates among such a large proportion of the population therefore might understandably be responsible for a substantial portion of the decline in the saving rate. However, evidence from various sources fails to support that view.

Indeed, evidence based on household surveys suggests that the drop in the personal saving rate occurred not among the baby boomers but among older workers in the 1980s, perhaps in response to increased benefits from Social Security and Medicare and capital gains on housing and other assets. One study that looked at the saving rates of households found significant declines in saving rates among households headed by those ages 45 to 64 in the mid-1980s compared with saving rates of households headed by people in the same age group in 1963 and in the early 1970s.⁴ Only minor declines in saving rates were found for households headed by someone age 25 to 44.

A downward shift in the proportion of income saved during the 1980s by those ages 45 to 60 is corroborated in another study using a different approach and a different source of data.⁵ Such evidence reinforces the view that the cohorts that were in their 40s and 50s during the 1980s are mainly responsible for the decline in overall saving. Less saving by older workers resulted in a strong decline in overall saving because those cohorts were in the part of their life cycle when saving is highest. And recent econometric evidence suggests that the personal saving rate would have been little different during the 1980s without the baby boom.

As the baby boomers reach the peak years for both income and savings, however, their increased rates of saving out of higher incomes could lead to some modest improvement in national saving. If the profile of saving by age groups that was observed in the mid-1980s continues to apply for the next 15 years or so, the aging of the population will result in a 0.8 percentage point increase in the personal saving rate from 1990 to 2010.⁶ If baby boomers respond to their circumstances by sav-

⁴Barry Basworth, Gary Burtless, and John Sabelhaus, "The Decline in Saving: Evidence from Household Surveys," *Brookings Papers on Economic Activity*, no. 1 (1991), pp. 183-241.

⁵Orazio P. Attanasio, "A Cohort Analysis of Saving Behavior by U.S. Households," working Paper No. 4454 (National Bureau of Economic Research, Cambridge, Mass., September 1993).

⁶Richard Cantor and Andrew Yuengert, "The Baby Boom Generation and Aggregate Savings" (working paper, Federal Reserve Bank of New York, April 1994).

ing a higher fraction of their incomes than did those cohorts in their 40s and 50s during the 1980s, an even bigger boost to national saving will result.

Of course, it is too early to tell how the baby boomers will respond to the circumstances that will confront them in the decade or two before they retire. Unforeseen changes will no doubt occur in immigration, the federal programs that provide support for retirement and health care, and the pace of economic growth. Yet these changes will have a sizable impact on the well-being of baby boomers in retirement. Moreover, it remains to be seen how the boomers will change their behavior in response to these economic factors—whether they will work more or fewer years, enjoy themselves more or less while they are relatively young and healthy, or save at a higher or lower rate during their peak earning years.

Based on what is known now, however, the degree of preparedness of the baby boomers for retirement is not a cause for alarm. The ratio of wealth to income for households headed by baby boomers in 1989 was comparable to that of their parents at similar ages before they reduced their saving rate. Moreover, the levels of wealth the boomers have accumulated are comparable to what theoretical models of lifetime savings suggest is optimal.

Nevertheless, many reasons exist for concern about the outlook for personal saving. Some groups of baby boomers face a bleak future, including those who are less educated, nonhomeowners, or single. Even though it is impossible to know what will happen to national saving and economic growth over the next few decades, relatively slow growth in real compensation over the past two decades implies that the total resources available to households have not expanded as fast as might be desirable. Consequently, both the level and the rate of personal saving might be lower than would otherwise have been the case. The United States' consumption-oriented society offers many ways to expand debt, sometimes encouraged by the tax code, but it may not place enough importance on the long-term rewards of saving.

Looking forward a few decades, some analysts worry that national saving will fall further when the baby boomers retire—and that decline could be a worldwide phenomenon. National saving could fall as public and private retirement funds sell assets to provide benefits to the large number of retirees. The trust funds for Social Security are expected to be depleted by 2029, and the private pension system may become a net seller of funds at about the same time.⁷ Providing health care and other benefits to the large elderly cohort will exert pressures on federal budgets at the same time that personal saving could fall slightly as retired boomers spend down their assets. The result of dissaving throughout the economy could be that interest rates will rise and asset prices will fall.

WHAT IS THE SITUATION TODAY?

The national saving rate may still be hovering close to the danger zone, but I am encouraged by the virtually unanimous awareness that low saving is a significant problem.

With the passage of the Omnibus Budget Reconciliation Acts (OBRA) of 1990 and 1993, the Congress and the various Administrations made a strong initial start on the problem. OBRA-90 set out the framework for future action through caps on discretionary spending and the pay-as-you-go scorecard. OBRA-93 pushed a little further with additional spending cuts and tax increases.

However, those actions have given only temporary respite to growing deficits and falling national saving. I emphasize temporary because prevailing policies still imply that deficits will soon rise again and keep national saving too low to prevent further slowdown in the growth of living standards.

According to projections based on current policies, despite the actions of OBRA-90 and OBRA-93, the deficit as a percentage of GDP will begin to rise at an accelerated pace toward the end of this decade as entitlement programs consume ever-increasing amounts of resources that must be withdrawn from saving and investment (see Table 3).

TABLE 3. THE BUDGET DEFICIT OUTLOOK THROUGH 2004
(By fiscal year, as a percentage of GDP)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Revenues	18.8	19.1	19.1	19.0	19.0	19.0	18.9	18.9	18.8	18.8	18.8
Outlays	22.2	21.5	21.3	21.4	21.2	21.3	21.4	21.6	21.7	21.9	22.1

⁷ Sylvester J. Schieber and John B. Shoven, "The Consequences of Population Aging on Private Pension Fund Saving and Asset Markets," Working Paper No. 4665 (National Bureau of Economic Research, Cambridge, Mass., March 1994).

TABLE 3. THE BUDGET DEFICIT OUTLOOK THROUGH 2004—Continued
(By fiscal year, as a percentage of GDP)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Deficit	3.4	2.4	2.2	2.3	2.2	2.4	2.5	2.7	2.9	3.1	3.3

SOURCE: Congressional Budget Office, *The Economic and Budget Outlook: Fiscal Years 1995–1999* (January 1994), p. 29.

NOTE: GDP = gross domestic product.

Private saving has begun to improve modestly—it averaged 5.2 percent of GDP in 1993 compared with its 45-year low of 4.5 percent in 1989—but no one expects that it will improve enough to offset the drain still coming from federal deficits. For example, if private saving should rise to its 1970s' level of 8.1 percent of GDP by 2004, a projected deficit of 3.3 percent in that year would still leave the national saving rate at 4.8 percent. That would be well below its 1970s' average of 7.1 percent.

The deficit not only denies capital to future generations in order to support the consumption of current generations—a recipe for lowering the growth of living standards—but it also risks imposing huge tax burdens on future generations to maintain the financial solvency of the federal government. Economists have tried to characterize the tax burden through the methodology of generational accounting. That methodology simply tries to see what net tax rates—federal, state, and local—will have to be on future generations in order to keep the promises made under existing legislation, not only to bondholders, but also to recipients of public programs.

Given their specific economic and demographic assumptions, generational accounts estimate that future generations will face prohibitively high net tax rates—close to 80 percent—if policy continues along its current lines. And because those are net tax rates, they mean that gross tax rates—taxes as a percentage of pretax income—would be even higher. By comparison, the generation born today will face a net tax rate averaging 40 percent over its lifetime, while the generation born in 1940 will have faced a net tax rate that averages out to 32 percent over its lifetime. The exact numbers depend heavily on the assumptions used, but the general conclusion does not: the tax burden facing future generations is an—impossible one to carry. Hence, changes to prevailing fiscal policies are inevitable.

LOOKING AHEAD

We have an opportunity to make significant strides in solving the problem of low rates of national saving. Inflation remains under control, the economy seems well positioned to absorb the short-term adjustments that necessarily come with deficit reduction actions, and projected deficits under prevailing policies do not begin to rise until 1999.

If we take advantage of this opportunity and act soon, we can reap enormous benefits in the future. Feasible changes made now in taxing and spending policies will produce increasing gains in deficit reduction and increased national saving in the decades ahead.

If we fail to act soon, however, this opportunity will pass. There will be other recessions during which necessary actions on the deficit would be suspended. Moreover, even if the recessions are only mild ones, the deficit problem will continue to grow worse and the necessary changes will become more difficult to make. Not least, providing benefits and services to retired baby boomers will exert additional pressures on public programs beginning in about 15 years. Which will make reductions in federal spending for these programs even more difficult to achieve. Making changes now will give boomers more time to adjust.

RESPONSES OF ROBERT D. REISCHAUER TO A QUESTIONS FROM SENATOR BRADLEY

Question: What proportion of the population will receive significant inheritances?

Answer: We have no direct answer to that question, but we do have some indirect answers. A recent paper by Robert Avery and Michael Rendall suggests that people 50 years or older in 1989 (approximately the parents of the baby boomers) will leave some \$10.4 billion (in 1989 dollars) in the form of 115 million bequests the mean value of which is \$90,167.

Also, 27 percent of households headed by baby boomers expect "substantial inheritances," according to CBO's tabulations of the 1989 Survey of Consumer Finances. Households with higher incomes are more likely to expect to receive substantial inheritances than those with lower incomes. For example, 21 percent of households in the bottom income quartile, headed by someone 35 to 44 years old, expect substantial inheritances, while 40 percent of households in the top income quartile in the same age group expect substantial inheritances.

PREPARED STATEMENT OF DALLAS L. SALISBURY

Introduction

I am pleased to appear before you this morning to review issues related to savings, economic security, and the long-term growth of the elderly population; the various Federal programs and policies that impact the elderly; and the degree to which income security is affected by private pensions. I ask that the full text of my submission be included in the record of the hearing.

My name is Dallas Salisbury. I am president of the Employee Benefit Research Institute (EBRI), a nonprofit, nonpartisan, public policy research organization located here in Washington, DC.

EBRI is committed to accurate analysis of employee benefit and economic security issues. Through our research, we strive to contribute to the formulation of effective and responsible health, welfare, and retirement policies. Consistent with our mission, we do not lobby or advocate particular policy solutions.

The issues the committee raises today are of extraordinary importance. America is not a nation of savers. In times past one had to save for each purchase, but not today. The primary emphasis we see today is on consumption and credit; on consumer confidence and what it will mean for consumption and economic growth. As more recent years have spawned advertising aimed at older Americans, the emphasis has still been on consumption. As individuals and governments have saved less and spent more, an increasing proportion of national savings has come from pension and retirement savings programs.

As a result of the growth of advance-funded pension and retirement savings programs we have seen the accumulation of over five trillion dollars in savings. Recent studies have found that pension savings have been a primary form of personal savings in the economy over the past twenty years.¹ Bosworth, et al., found pensions to represent 50% of personal savings between 1976 and 1980, 59% between 1981 and 1985; and 51% between 1986 and 1990. Some estimates, however, indicate that to maintain work life living standards in retirement—without selling one's home—would require pension savings to be closer to 12 trillion dollars today.² The difference is crucial, as studies of this issue find that boomers are saving one-third of what would be needed if we do not count housing wealth, but over 80 percent if we do.³ The issues of what we count, what we assume about future economic growth, and what we assume about inflation in such areas as health care, are at the center of apparent contradictions in the results of different studies of the baby boomers' retirement income prospects.

There is also a necessity to look carefully at differences within the population. The baby boomers will be as diverse in economic and social character in retirement as they are today. There cannot be enough emphasis on the difference that future economic growth—including real wage growth—will make in the ultimate accuracy of projections, on the importance of future rates of inflation in general, and on health care costs in particular.

Concern over saving adequacy, combined with an aging population, has begun to produce a new focus on saving and financial planning. More financial planning columnists have appeared in newspapers. More magazines have developed with a financial planning focus. More television financial networks and shows have appeared. More attention to encouragement of retirement savings and financial planning by financial services organizations, unions, and employers have begun to appear, including both print and television advertisements. More regular information on employee benefits is being provided to workers along with more software for the personal computer that allows regular reality checks: assessing what your savings to date will or will not provide in retirement at alternative ages. This information has given new meaning to the concept of lifelong learning, as boomers face the prospect of later retirement ages if they have not saved enough. A related issue is whether there will be jobs for those who need to remain employed.

What Do We Count As Savings?

The concept of savings, although widely discussed, has not been consistently and clearly defined.⁴ When considering the issue of whether individuals are saving enough to support themselves in years when they do not work or have emergencies, the traditional measure is the full value of all resources they will have available to them: the value of liquid assets, any real estate they own, the full value of retirement accounts or lump-sum distributions for which they may be eligible, and the value of any other private or government benefits. This method is not consistently used in assessments of the prospects of future retirees.

When considering the issue of whether the nation is saving enough to provide for future economic growth, the measure must also take into consideration negative savings by individuals, private entities, and governments as well as assets noted above. The first step toward increasing the national savings numbers, were that deemed desirable, would balancing of the federal budget. Until that step is taken, all Americans may be getting a regular message that going in debt to live better today is deemed appropriate as a matter of public policy.

America is not a nation of individual savers. This fact led to creation of the Social Security program, the employment-based pension system, and programs such as individual retirement accounts. These programs seek to create a level of deferred consumption. Since 1986 we have seen a decline in the traditional measure of personal savings (chart 1). During this same period, however, net housing wealth increased (chart 2), as did pension wealth (table 1). The Social Security program and federal pension plans have built assets in the form of Treasury securities, but the "surplus" has been spent on other programs, leading to a net deficit for the federal government. The Social Security program, when considered with Disability and Medicare, will move to a point where benefits exceed new tax revenue within 15 years.⁵ The trends and data noted above do suggest, however, that savings available to individuals will continue to grow through the pension system.

The first issue for policymakers is to determine their respective goals. First, should we focus on absolute income levels such as two times the poverty rate, on replacement of final income, or some combination. The Disney Chairman, for example, does not "need" 70% replacement to meet "The American Dream." Second, should our focus be different for what the government views as a must for programs such as SSI and Social Security, versus where they wish to provide incentives. Should incentives seek 70% replacement in general, or only 70% for incomes of up to \$150,000? The differences in conclusions reached by analysts are frequently attributable to different goals.

How Much Savings Is Enough?

A second area of definition that leads to apparent disagreements is the concept of adequate savings. How much income does one need in retirement for it to be adequate? A public policy definition of keeping the retired out of poverty represents a very different standard than a goal of assuring that those above poverty have 70% or 80% of final income. Further, is liquid savings what one should consider, or the income potential of all assets, including the income benefits that could come from selling a home? The answer makes a very big difference. The answer for the individual may also be very different from the concern of public policy.

Mandated public action—Social Security, food stamps, SSI—has provided an income base. The Federal government has then acted as an employer to augment savings with both defined benefit and defined contribution plans for its employees, and has encouraged other employers to do the same. Public policy has been to provide a floor of income with high replacement at low income levels (over 100% for the lowest income), and low replacement for those with middle and higher income (27% from Social Security for an individual earning \$60,600 in 1994), leaving the rest to employers and individuals. All are therefore saving enough to survive; many are not saving enough to maintain their final years income into retirement. Most will want to do more than survive and will have to save more to do so.

A study by the Congressional Budget Office (CBO)⁶ compares the income and wealth of the baby boomers with that of their parents' generations at similar points in their lives to assess how well today's workers are preparing for retirement. Essentially, the CBO is answering the question: How well will baby boomers do in retirement compared to their parents based on their financial circumstances at similar points in their working careers?

Using data from the 1960 Census, the 1990 Current Population Survey (CPS), and the Survey of Consumer Finances (SCF) in 1962 and 1989, CBO finds that both real household income—that in excess of inflation—and the ratio of household wealth to income are higher on average for baby boomers aged 25 to 44 in 1989 than was true for young adults of the same age in 1959 and 1962, respectively. CBO notes that the parents of the boomers, in general, seem to have adequate financial resources in retirement, which is in part due to government transfer programs and above normal capital gains on housing assets (rather than systematic financial planning).

CBO concludes that most baby boomers are likely to enjoy higher real incomes in retirement than their parents, assuming that real wages continue to grow, Social Security and private pensions remain intact, and health care expenditures do not outweigh other gains. CBO notes the prospects are not as sanguine for some demographic groups as others, in particular for the single, the less educated, and nonhomeowners.

One criticism of this work regards the assumed standard of comparison, i.e., the adequacy of future retirees' finances was judged by comparison in real terms to previous generations. This may be especially important in a society that is accustomed to and expects increased standards of living over time. In this sense, critics argue that adequacy of retirement income should be judged by a comparison of living standards in retirement with living standards enjoyed while still working, or maybe even a comparison of the retired to those currently working. A retiree may have higher real income in retirement than his parents but still have a lower standard of living than when he was working. Would his retirement income be considered in some sense inadequate? The answer to this question may very well have different answers, depending on whether it is answered from a personal financial planning perspective or from a public policy perspective.

It is also important to note, as the CBO report discusses, that the relatively optimistic scenario for boomers relative to their parents' generation is dependent on future economic growth, more specifically on the assumption that wages will grow faster than prices over the next 20 to 40 years. Long-term economic growth may be retarded by low savings and investment and by government fiscal policy.

A study by Lewin-VHI for the American Association of Retired Persons reaches essentially the same conclusions as the CBO and Easterlin, et al., noting that most baby boomers should have higher income in retirement than today's elderly, while stressing that not all will benefit uniformly: "Large numbers will face a retirement of economic risk and deprivation because of a history of low earnings, intermittent employment, poor education, discrimination, and an inability to adjust to changing employer requirements, among other variables." ⁷

The study begins with a note that should be applied to the assessment of all such studies: "At the outset, it should be noted that these projections at best reflect certain assumptions about the course of future events, which are incorporated in a mathematical model. Needless to say, these data should not be construed as a prediction of events to come but rather as a probability, based on our knowledge at present."⁸

Another study⁹ projects the average resource and consumption levels in retirement of early, middle, and late baby boomers to determine how well prepared these groups are for retirement relative to current retirees. The study projects that all three groups of boomers will be able to sustain a level of total consumption in retirement greater than that of current retirees. The authors argue, however, that Medicare and Medicaid transfers should be excluded from consumption. With such an adjustment, the consumption of early and middle boomers remains greater than that of current retirees, though by a smaller margin, and the consumption of late boomers in retirement is projected to be just under that of current retirees. The authors note that when medical transfers are excluded, only the oldest boomers will have a level of consumption in retirement exceeding that of previous retirees to the extent expected with economic growth. However, it is not clear, given the importance of medical expenditures to the well-being of the elderly, that such transfers should be excluded from consumption when making such projections. Once adjustments are made in prospective government fiscal policy, i.e., tax increases and transfer payment reductions, to counter what the authors see as the long-term unsustainability of current fiscal policy, the prospects for the financial security of the baby boom generation's retirement dim, i.e., their level of consumption in retirement is reduced through increased taxes and decreased transfers. Such fiscal adjustments would have a relatively greater negative impact on younger baby boomers.

Another study focused on the effects of personal targeted retirement accounts (IRAs, 401(k)s, and Keoghs) on the financial status of recent retirees and on persons approaching retirement.¹⁰ Based on a comparison of age cohorts across time, it concluded that the real personal financial assets of younger cohorts were substantially larger than the assets of their predecessors due to increasing contributions to personal retirement accounts and due to the finding that such contributions have not displaced other forms of saving. While families that are aged 76 currently have an average of \$43,000 in personal financial assets (including assets in addition to personal retirement accounts), the study projected that families with head of household aged 76 or older 18 years from now will have approximately \$25,000 more in assets (this includes both contributors and noncontributors to personal retirement accounts). The difference among families was projected to be even greater, \$93,000 versus \$160,000. The study concluded that "If these trends continue, the baby boom generation will accumulate substantially larger levels of personal financial assets than their older counterparts and thus after retirement will have much larger pools of accessible assets upon which to draw to meet unexpected contingencies." Whether such outcomes actually materialize will depend to a large degree on the preservation of lump-sum distributions received by workers as they change jobs, as I will discuss later.

In conclusion, the evidence indicates that boomers, in general, will enjoy a standard of living, i.e., real level of consumption, in retirement that exceeds that of their parents. Whether they will be able to maintain the standard of living they enjoyed while working once they move into retirement is a different question with a

less clear answer. A key role will be played by wealth accumulation through homeownership. To the extent that boomers are willing to tap into this resource to fund their retirement, they would appear at this early stage to be in pretty good shape. In addition, a key role will be played by individual savings, particularly through employment-based savings plans such as 401(k)s. Also, fiscal policy decisions made by the federal government will impact boomers by affecting their disposable income today and thus their ability to save, as well as benefits they will receive in retirement through Social Security and Medicare. It is important to realize that many of the things that will impact the boomers' retirement, such as economic growth, economic developments involving housing market trends, and government fiscal, savings and retirement policy, will unfold over a period of decades yet to come and are difficult to predict.

Given the heterogeneity of the baby boom generation, more research is needed to identify specifically which subgroups within the generation are currently at risk and what the size of the problem is likely to be for them. This involves moving beyond broad sweeping generalizations regarding the boomers. Groups that would now appear to be at risk to some degree include nonhomeowners, the less educated, the single, and the youngest boomers.

What Should One Save?

At what age one begins to save makes a great deal of difference. An individual saving 3% of salary on a pre-tax basis, obtaining a tax deferred investment return exceeding inflation by 2%, would be able to purchase an annuity at age 65 worth 5% of final salary if they began saving at age 50; 9% of salary if they began at age 40; and 13% of salary if they began at age 30. This assumes that salary increases at a constant 1% above inflation. Looked at from the opposite direction, to have 60% replacement of final salary would require annual contributions of 13% of salary from age 30; 20% of salary from age 40; and, 35% of salary from age 50. Since the law limits contributions to 25% of salary, waiting to age 50 would not allow the goal to be achieved without saving even more outside the qualified plan.¹¹

The worker contributing the maximum of 25% allowed from age 30 would replace about 110% of final salary; beginning at age 40 about 75% of salary; and, beginning at age 50 about 43% of salary.

These examples highlight some relevant issues. First, the individual who has not saved, and does not settle into a final job until 50, should hope for both a defined benefit and a defined contribution pension plan. Second, the individual who has a defined contribution plan available should contribute as much as possible beginning at an early age and preserve distributions at each job change. Third, the individual should seek employment at an organization that offers some type of retirement plan, with the ideal being both defined benefit and defined contribution. Fourth, the older the individual is when he makes what he hopes will be the last job change the more advantageous it will be to participate in a defined benefit plan.

Pension Coverage and the Changing Work Force

The American economy and work force have continued to change along trend lines in evidence since the 1960s. These changes are beginning to show in pension coverage, participation and benefit entitlement as well (table 2).¹² Among all private-sector wage and salary workers, for example, pension participation has been steady since 1972 at between 48% (1972, 1983, 1988) and 50% (1979, 1993). This climbs to 56% of all full-time workers. Men have experienced a slight decline from 54% to 51%, while women have gained from 38% to 48%. Participation is highest for men aged 45-49 at 63%. Participation in 401(k) plans has also grown from 3% in 1983, to 14% in 1988 and 23% in 1993. Among those offered the opportunity to participate in such a plan, 67% did so in 1993 compared with 39% in 1983.

Those who work for employers without any plan work predominantly for small employers, where 13% coverage is found compared with 97% among the largest employers.

Among full-time workers not participating in a plan (that their employer sponsors), the most often cited reasons are: 24% cite not working enough to qualify; 31% cite not having worked for the employer long enough; 25% choose not to contribute; 8% are in a type of job not covered; 2% are too old; 1% are too young. Across the work force, 1993 saw gains for the pension system, both in absolute numbers and in percentage terms. Looking at private-sector workers over the age of 21, with one year on the job, and working more than 1,000 hours per year (the ERISA work force), 67% worked for an employer with a plan, 56% participated in a plan, 48% were entitled to a vested benefit, with 86% of participants being vested (table 2).¹³

The Census documents that female labor force participation has risen dramatically. Women in the

work force in 1993 were nearly as likely to have pension savings as men, compared with a 16 percentage point shortfall in 1972.¹⁴ Women were not as likely to be participants but were as likely to be vested when they participated.

The Census documents that more workers are in professional services and retail jobs, fewer are in manufacturing. Professional service and retail workers both experienced pension growth since 1988. Twenty-four percent of private-sector pension participants are now in service jobs, up from 19% in 1988. Manufacturing now employs 33% of all private pension participants.

The baby boom is now aging, with the effect of moving more workers into ages where available research indicates higher job stability, higher pension participation, and higher general savings. For example, when offered a 401(k) plan in 1993, 48% of private-sector workers under age 30 elected participation compared with 72% of workers over age 30. The overall 401(k) participation rate among those offered a plan grew from 60% in 1988 to 67% in 1993.¹⁵

Changes in the law (five-year vesting) and work force patterns combined to move the number of vested pension participants, that is, those with a nonforfeitable benefit, to 86% of all participants, from 77% in 1988 and 52% in 1979.

Pension Participation Over a Lifetime

Workers in the 41-50 age group reported the highest rate of pension coverage for 1993 (72.9%). This compares with 58.8% of workers aged 21-30 who reported coverage (coverage rates are lower for workers younger than age 21).¹⁶ Plan participation was also greatest among workers aged 41-50 (63.5%). Thirty-six percent of workers aged 21-30 reported participating in their employer's plan. While the low coverage and participation rates among the young hold down the rates for the total work force, it can be assumed, based on past experience, that many of the young will become covered by and participate in employment-based retirement plans as they become older.

For this reason, analysts argue that when evaluating the potential delivery of benefits by the private pension system, workers well established in their careers should be focused on. In addition, marital status and the pension status of a spouse are important considerations because married individuals are likely to have access to their spouses' pension benefits.

Policymakers should not be too fixated by relatively low pension participation rates among very young workers when focusing on future retirement income prospects. Many nonparticipating younger workers will move into covered employment and participate in an employment-based retirement plan as they progress through their working years.

Pension Plan Design Is Changing

It seems that America has a tendency to make public policy based upon the practices of the largest employers, and to attribute, or desire, the characteristics of those who work for the largest organizations for the rest of the work force. For purposes of savings and retirement planning the history of small organizations is quite different from that of large organizations.

- Small organizations have not been able to afford—and frequently do not want—to be paternalistic. That is, they have not promised the prospect of life long employment and a full plate of benefits.
- They have emphasized defined contribution and individual account retirement programs with lump-sum distributions on job termination. Since 1980, we have seen large organizations, public and private, begin to move in these same directions: redesign of defined benefit plans, expansion of defined contribution plans, and payment of lump-sum distributions from both.
- Many large organizations are seeking to be less paternalistic. They are no longer saying: "Focus on work and productivity and you will have a job and we will take care of economic security for you," providing benefits as part of a social contract. They are saying: "Focus on work and productivity and you might have a job, and we will provide benefit opportunities for you so that you can become self-reliant." A defined benefit pension plan (the sponsor contributes whatever it takes to keep the promise) is being provided when it serves a work force management purpose, but these defined benefit plans are increasingly taking on new forms, with a focus on individual accounts and/or lump-sum distributions.
- Large organizations are seeking to be more flexible. Flexibility and reinvention, as now being implemented by the federal government and many others, means more reliance on defined contribution retirement plans.

on a smaller work force, and on the use of lump-sum buyouts and pension incentives to achieve that smaller work force. With flexibility comes an end to a psychology of lifetime employment—even though few in this nation have had lifetime employment with one firm, and a significant number move to other employment after leaving their "career" job.¹⁷

- Large organizations are seeking to change employee benefit programs into a form where expense is more predictable. The federal government may become the only entity that promises benefits with the presumption that it will always be there. Between 1950 and 1980 this presumption was part of the benefit programs of most large organizations. Large organizations' recognition that they had to innovate and reinvent to survive has contributed to new pension forms with more built-in cost control, expansion of lump-sum payments instead of annuities, reduced retiree medical promises, expanded worker contribution benefit options, enhanced communications programs, and a common emphasis on individual responsibility.

Large organizations are beginning a move from paternalism to testing concepts of partnership, shared responsibility, and increased individual responsibility. Small organizations have historically been at this end of the spectrum. The Federal government took the first step in this direction as an employer in 1984 with the introduction of the Federal Thrift Savings Plan and a significantly reduced value defined benefit pension plan.

Congress has been moving social programs in this direction since 1983 as it has taken actions that will result in full Social Security benefits being paid at later ages, a decrease in early retirement benefits, more of the benefits being subjected to income taxes, and the availability of Social Security Administration individual statements with projections of what recipients will get, and when.

These movements, and the societal attention they will command, are likely to motivate more Americans to save more for themselves. These savings are likely to be found increasingly in pension and retirement savings plans due to work force aging, the structure of payroll deductions, employer matching contributions, the convenient packaging of investment options, and public policy, employer, service sector and media attention to the need for savings to achieve a dignified retirement. These trends will also increase the emphasis on the value of saving and beginning financial planning at an early age, as the ability to depend on someone else doing it for you continues to decline.

A Closer Look at Plan Types

While the number of private employment-based pension plans and plan participants has been increasing, proportionately fewer are defined benefit plans and defined benefit plan participants. It is often argued that such trends jeopardize retirement income security because defined contribution plans, which typically involve explicit worker decision making, are replacing defined benefit plans. There is concern as to whether workers are typically in a position to make wise decisions with regard to their participation in such plans.

The total number of private tax-qualified employment-based plans (both primary and supplemental) more than doubled from 311,000 in 1975, when the Employee Retirement Income Security Act (ERISA) became effective, to 712,000 in 1990 (table 3). The total number of private defined benefit plans increased from 103,000 in 1975 to 175,000 in 1983, then decreased to 113,000 in 1990. The total number of private defined contribution plans increased from 208,000 to 599,000 between 1975 and 1990. The number of active participants in primary defined benefit plans decreased slightly, from 27 million to 26 million between 1975 and 1990, while the proportion of all active participants in these plans decreased from 87 percent to 62 percent.

There is no evidence, however, of a universal employer "shift" from defined benefit to defined contribution plans. Of the net decrease in the number of defined benefit plans, 75 percent consisted of two to nine active participants. Between 1985 and 1990, there was a net decrease in the number of primary defined benefit plans of 33 percent, or 56,651 plans, and the net decrease in plans with two to nine active participants was 42,328. Between 1985 and 1990, the net increase in the number of defined contribution plans with two to nine active participants was 66,425 plans; this accounted for 45 percent of the net increase of 149,078 in the number of primary defined contribution plans (table 4). Therefore, the rapid growth in defined contribution plans cannot simply be explained by a replacement of defined benefit plans with defined contribution plans, because the net increase in defined contribution plans is far greater than the net decrease in defined benefit plans.¹⁸

The implication is that many workers, particularly those in small firms, now have a defined contribution plan, very likely a 401(k) plan, when in the past they likely would have had no employment-based retirement plan. It is implicitly assumed in arguments that defined contribution plan trends jeopardize

retirement income security in that if 401(k) plans were not allowed, workers covered by them would instead have a defined benefit plan. This assumption is incorrect; many likely would have no employment-based plan at all. Therefore, they cannot be worse off because of these developments. Whether they are utilizing these plans in such a manner as to maximize their potential is a separate question.

Such plans do involve explicit decision making on the part of individuals. They must decide whether to participate in the plan, how much to contribute, how the funds should be invested within choices offered by the sponsor, and whether to roll over lump-sum distributions received from such plans on job change. Poor decisions will weaken retirement income security. However, it is important to realize that employees can often receive a higher benefit from defined contribution plans than they would from comparable defined benefit plans, assuming the same investment income, particularly if they are young and mobile. It has been documented that workers with accrued pension benefits (i.e., those in final average defined benefit plans) can experience pension losses if they change jobs prior to retirement.¹⁹ Participants in defined contribution plans do not experience the same losses just by changing jobs. Defined contribution plan participants may have the opportunity to save more for retirement than they would in a comparable defined benefit plan; however, they need to recognize their opportunity for retirement planning and make decisions to maximize their retirement income, such as preserving lump-sum distributions received on job change.

Among workers covered by both defined benefit and defined contribution plans, 60% indicated that the defined contribution plan was the most important in 1993. This may well prove to be true for most of them, as the historical turnover rates discussed elsewhere in this testimony cause the defined contribution plan to have a larger lump-sum distribution value for many years. When an analysis was conducted for EBRI, looking at both types of plans with an identical cost, it was better off under the defined contribution plan until age 55 (28 years of service).

Will Pensions Be a Savings and Income Source Tomorrow?

Pension plans now provide income to 30% of those aged 55 and older, 37% of those aged 65 and older, and 50% of new retirees.²⁰

During 1990 pension plans provided \$234.3 billion to retirees in annuity payments (table 5) and in 1990 \$125.8 billion in the form of lump-sum distributions was paid from all tax qualified programs (table 6).²¹

The present approach to counting savings does not fully account for the contribution of these programs. Capital gains and investment earnings are not counted, and public defined benefit plan pension contributions are also excluded (table 7). Private pension capital gains and investment earnings accounted for net additions to plan assets of \$1.062 trillion over the past ten years. Public plan contributions totaled \$524 billion during the period 1987 to 1991, most of which was defined benefit plans and thus not included in savings.²²

A combination of factors raise questions about the future role of pensions in savings and retirement income.

- What will government policy be toward pensions and what actions will that policy bring? Action taken in the 1993 budget act to reduce allowable contributions to pension plans will reduce projected pension benefits for some by over 30%, resulting in lower contributions to plans and smaller asset accumulations.²³ Senate Finance Committee staff have suggested in recent speeches that further cuts in what can be saved through pensions are in the offing. Will individuals offset lower pension savings by saving more outside pension plans?
- What types of plans will employers sponsor in the future? Prior to 1984, Federal employees had a generous defined benefit pension plan that paid most benefits in annuity form at retirement. Now more than 50% of Federal employees have a smaller defined benefit plan and a generous defined contribution plan that pays lump-sum distributions. The private sector has followed this Federal lead, as previously noted, and has placed more emphasis on defined contribution plans and lump-sum distributions. Changing attitudes of both employees and employers may cause this movement to continue.
- What will individuals and employers be able and willing to save though pension arrangements if health costs continue to absorb increasing levels of compensation? Survey data make it clear that individuals worry about health insurance first, pensions second, and other savings last.²⁴ Small employers have

always moved to establish health benefits ahead of any pension arrangement. Large employers deal increasingly in terms of total compensation and employee flexibility, which may result in lower pension savings by individual choice, but with implications for savings.

- What will individuals do with lump-sum distributions? Over \$400 billion was paid in distributions between 1987 and 1990. A total of \$219.6 billion was rolled over into a rollover IRA, leaving \$180.4 billion taken into income or directly transferred to a new employer's plan. The most recent data available indicate that more individuals are saving lump sums for retirement—27% in 1987-1993 versus 7% prior to 1980—and fewer are spending them—23% in 1987-1993 versus 50% prior to 1980 but there is still a great deal of money not being preserved for retirement.²⁵ This is not a judgmental statement, but the numbers make clear that how much is preserved will make a significant difference for both present savings and retirement savings. This is the case for those leaving private plans as well as those leaving Federal and other public employment. Pension savings would be much larger today had individuals never received lump-sum distributions but only rollovers while they were still working and annuity payments once they retired.
- A recent study for AARP projects that between 81% and 84% of baby boomers will have pension income during retirement. The projection is based on two crucial assumptions: first, that nearly all lump-sum distributions are rolled over each time one changes jobs; second, that all income is paid out as an annuity.²⁶ Neither of these assumptions can be relied on due to turnover, lump-sum distributions, and the decreasing rate of annuitization. The projection does, however, provide a realistic estimate of the proportion of the baby boomers who will earn pension wealth and benefit from it economically. Direct pension income reciprocity during retirement is likely to be little higher than the 50% of new retirees we see today, while far more retirees will have asset income that is attributable to pension lump-sum distributions taken in the past. Others have recently written of this as "The Pension Anomaly."²⁷ Some comment on the way this anomaly leads to bad data and to misunderstanding of who benefits from the pension system as it functions today.²⁸
- There is a significant gap between individual expectations for employer-provided retiree medical benefits and what will actually be provided.²⁹ Were individuals to become more aware of what they will need to provide for themselves, it could serve to increase the saving incentive. Most of the studies reviewed above assume limited change in the area of health cost for the individual in assessing the future, an assumption that appears unrealistic.

Social Security as an Income Source

Social Security is also an important component of what individuals view as part of their savings for periods of disability and retirement. The program paid \$34 billion to the disabled and \$264 billion to the retired in fiscal year 1993.³⁰

There has been a debate among researchers in the past about the impact of Social Security on individual savings, but a seeming agreement that the knowledge that it will provide a base of income eliminates the feeling of a necessity to save for some. Those working today have watched many parents retire with near total reliance on Social Security and do well at maintaining a standard of living. Among lower income Americans there is a belief that the same can be true for them. Public confidence in the program is weak, however, particularly among the young.³¹ As the public begins to understand the benefit implications of increases in the retirement age it could well encourage added savings. As shown by table 8, the decline in benefits—10% at age 62 when normal retirement moves to 67, 25% were normal retirement age to increase to 70—will clearly increase the need for supplemental savings for those who choose to retire early, and for added years of work for those who do not wish to take a lower benefit than that which is now available at age 65.³²

Were Social Security benefits reduced by this further increase in retirement age, through greater benefits taxation or through a direct reduction in the benefit formula, individual and pension savings would need to be greater to achieve the same standard of living. Were benefits maintained by finding more revenue—

through increases in payroll tax rates and/or expansion of the taxable wage base—the portion of the total compensation package available for pension contributions and savings would be reduced with a likely negative effect on both individual and pension savings.

What the federal government does with both Social Security and Medicare benefit levels and financing will have a direct impact on both the ability of employers and individuals to engage in retirement savings and on the amount of savings they will need to maintain a targeted lifestyle in retirement.

Work Force Patterns And Pensions

A great deal has been written and said in recent years about tremendous changes in the nature of employment. One reads constantly about a more job-mobile society. The higher mobility hypothesis is used to argue for defined contribution plans, portability, lump-sum distributions, and preservation. Based on Census data from 1963 to 1979, an article written in 1982 noted job patterns that more readily support a hypothesis that our society has been job-mobile for decades:

The typical worker is currently on a job which will last about eight years in all, counting the years it has already lasted. An important minority—about 28%—are currently employed in near lifetime jobs lasting 20 years or more, and 17% in jobs which will last 30 years or more. An equally important minority are at work in what will turn out to be very brief jobs—about 23% will have eventual tenure of less than two years. *A clear majority of workers—58 percent—are currently holding reasonably long jobs, those which will last five years or more (emphasis added).*³³

This is significant for a discussion of individual and pension savings in a number of ways.

- In what we talk refer to as the "good old days" from a job perspective, only 58% of workers were expected to be in jobs long enough to meet the current general pension vesting standard of five years (e.g., the federal employee pension plan). This tells us that job turnover has interfered with pension accumulation for a long time. As a result, a requirement for mandatory participation would not significantly increase pension receipt of *meaningful benefits*, that is, benefits of significant cash value. And, portability would only be a clear contributor to retirement savings if preservation were part of the system.
- Given the high turnover for 42% of workers, one might have anticipated a higher savings rate to accommodate transitions. This did not and has not developed. The 28% in jobs of 20 years or more are most likely to be affected by the retirement incentives, buyouts, and downsizing about which we read so much. Will workers assume such patterns are permanent and save more? Available data indicate that continuing to work after one's longest career job ends was the rule prior to 1979, and it likely still is.³⁴
- The notion that, until recently, workers could assume early attachment to a lifetime job is not supportable by the numbers. As Hall stated: "At no age is the probability very high of a given job becoming a lifetime job."³⁵ More and more workers have historically found good job matches by their late thirties. After age 40, about 40% in any given age group could expect to remain in that job for 20 years or more.³⁶ This does raise the question of whether this number is now on the decline, but there is not yet data to show it. Since 1979, however, female job tenure has been on the increase as labor force participation has risen (nearly 75% today compared with about 40% in 1960 and 62% in 1980). Table 9 and charts 3 and 4 present both the data and a graphic picture of tenure trends.³⁷ This has brought with it much higher rates of pension vesting and pension savings, and the promise of far more dual pension households in retirement.
- The number of jobs held in a lifetime does appear to be increasing for the young, but there is no data to show any change in older worker patterns. Hall reported that "job shopping is most intense in the early twenties—by age 24, the average worker has held four jobs out of the ten they will hold in an entire career. The next 15 years, from age 25 through 39, will contribute another four jobs. Then, less than three more jobs will be held on average."³⁸ A 1992 Bureau of Labor Statistics report found that, between 1978 and 1990 those between age 18 and age 29 held 7.6 jobs, compared with the five reported by Hall for the earlier period.³⁹

In 1980, 51% of baby boomers were counted as being in the labor force at ages 16 to 24. All boomers were under the age of 35. All, in short, were at a very high turnover stage of life and represented such a large proportion of the total labor force that they created the impression of a more mobile work force in general. As

of 1990, 22.7% of boomers were over age of 40, the age at which job change begins to slow. History says that on average this older group will still hold three more jobs. The legitimate question arises of whether this average will increase as the boomers age, i.e., whether—due to changes in the economy—they will continue the mobility of early years. If it does, it could increase the motivation to save on the one hand, and, on the other, make it more difficult. On their 30th birthday, over 40% of the young had held their jobs for two years or less, with about one-quarter holding jobs more than six years.⁴⁰ The low savings and voluntary pension participation rates of the young may well be explained by decisions to change jobs frequently. At the older end of the age spectrum it is worth considering that in 1979, 26.3% had left their career job by 50; 38.9% by 55; 58.2% by 60; and 70.6% by age 62.⁴¹ New data to assess whether this has changed significantly will allow new savings assessments.

Conclusion

A consensus exists in America that we do not save enough as a nation. A review of the income of the elderly today indicates a population that is doing well relative to prior generations. A review also suggests that the retired would be doing better had they saved more, and, that most would have had to save more to maintain the income levels they had prior to retirement.

A review of available evidence indicates that on a total wealth basis, and a pension savings basis, those in the work force today are doing better than previous generations. A minority, however, are building the individual and pension savings that will allow them to meet the goal of maintaining final employment income throughout retirement, without using real estate to produce income.

Should the timing and value of Social Security benefits, Medicare, and employer-based defined benefit pension and retiree medical benefits continue to be reduced, the level of necessary savings will increase, not decline. Should the movement toward voluntary pension participation and lump-sum distributions continue, increases in participation rates and rates of rollover will be necessary to achieve the income levels projected by the studies reviewed above.

It should be stressed that the factors and trends reviewed here are present among both public-sector and private-sector employers and workers. Public opinion surveys indicate that individuals realize that they should be saving but do not believe they have the capacity or self-discipline to save enough. They favor savings through Social Security, employer pensions, and possibly, mandatory salary reduction.

The demographic, economic, work force and workplace changes now taking place combine to require savings now, more than ever.

¹ See *EBRI Issue Brief* no. 129; Bosworth and Burkless, "Effect of Tax Reform on Labor Supply, Investments, and Savings," *Journal of Economic Perspectives* (Winter 1992); Congressional Budget Office, "Assessing the Decline in the National Savings Rate," April 1993; and Bosworth, Burkless and Sabelhaus, "The Decline in Saving: Evidence from Household Surveys," *Brookings Papers on Economic Activity*, 1991.

² Kantor and Madden, "Funding U.S. Retirement Benefits: A 100 Year Perspective," May 1994.

³ Bernheim, "The Adequacy of Saving for Retirement: Are the Baby Boomers on Track?" presented at EBRI policy forum, Retirement in the 21st Century: Ready or Not?, Washington, DC, May 4, 1994, and commentary by Joyce Manchester.

⁴ See *EBRI Issue Brief* no. 129.

⁵ Board of Trustees, 1994 *Annual Report of the Board of Trustees of the Federal Old-Age, Survivors Insurance and Disability Insurance Trust Fund* (Washington, DC: U.S. Government Printing Office, 1994); and *EBRI Notes*, June 1994.

⁶ See Congressional Budget Office, *Baby Boomers in Retirement: An Early Perspective* (Washington, DC: CBO, 1993), and CBO Testimony Statement of Robert D. Reischauer, Director, CBO, before the Subcommittee on Social Security, Committee on Ways and Means, U.S. House of Representatives, September 21, 1993.

⁷ Lewin-VHI, Inc., *Aging Baby Boomers: How Secure Is Their Economic Future?* (Washington, DC: American Association of Retired Persons, 1994).

⁸ Ibid.

⁹ See Auerbach and Kotlikoff, *The United States' Fiscal and Saving Crises and Their Implications for the Baby Boom Generation*, Report to Merrill Lynch & Co., Inc., February 1994; and Merrill Lynch, *Saving the American Dream: An Economic and Public Opinion Study* (Princeton, NJ: Merrill Lynch, Pierce, Fenner & Smith, Inc., 1994).

¹⁰ See Venti and Wise, "The Wealth of Cohorts: Retirement Saving and the Changing Assets of Older Americans," NBER Working Paper No. 4600 (Cambridge, MA: National Bureau of Economic Research, 1993).

¹¹ EBRI calculations.

¹² EBRI tabulations of the Employee Benefits Supplement to the April 1993 Current Population Survey.

¹³ The Employee Retirement Income Security Act of 1974, ERISA, as amended, requires that a worker meeting these requirements who is covered by a pension plan be allowed to participate.

¹⁴ EBRI tabulations of the Employee Benefits Supplement to the April 1993 Current Population Survey, and U.S. Department of Labor, Social Security Administration, U.S. Small Business Administration, Pension Benefit Guaranty Corporation, *Pension and Health Benefits of American Workers: New Findings from the April 1993 Current Population Survey*, May 1994.

¹⁵ Ibid

¹⁶ See forthcoming *EBRI Issue Brief*, "Baby Boomers in Retirement: What Are Their Prospects?"

¹⁷ Hall, "The Importance of Lifetime Jobs in the U.S. Economy," *American Economic Review* (September 1982), and *EBRI Issue Brief* no. 121.

¹⁸ See *EBRI Notes*, March 1994) and *EBRI Special Report* SR-17/Issue Brief no. 141.

¹⁹ See *EBRI Issue Brief* no. 65; and "Tension Portability and Preservation: Assuring Adequate Retirement Income into the 21st Century," EBRI Policy Forum, Washington, DC, May 1991.

²⁰ See Yakoboski and Silverman, forthcoming in endnote #16.

²¹ See *EBRI Issue Brief* no. 146.

²² See *EBRI Quarterly Pension Investment Report*, Fourth Quarter 1993.

²³ EBRI Issue Brief forthcoming, "Analysis of the 1993 Amendments to Section 401(a)(17)."

²⁴ See *EBRI Issue Brief* no. 132 and *EBRI/Gallup Reports* #G-40 and #G-42.

²⁵ See endnote #14.

²⁶ Lewin-VHI, Inc., *Aging Baby Boomers: How Secure Is Their Economic Future?* (Washington, DC: American Association of Retired Persons, 1994).

²⁷ Goodfellow and Schieber, "The Role of Tax Expenditures in the Provision of Retirement Income Security," in *EBRI, Pensions in a Changing Economy*, 1994.

²⁸ See *EBRI, Pension Funding & Taxation: Implications for Tomorrow*, 1994.

²⁹ See *EBRI/Gallup Report* #G-51, and *EBRI Issue Brief* no. 130.

³⁰ Board of Trustees, 1994 *Annual Report of the Board of Trustees of the Old-Age, Survivors and Disability Insurance Trust Fund* (Washington, DC: U.S. Government Printing Office, 1994).

³¹ See *EBRI/Gallup Reports* #G-56 and #G-57, and Friedland, "When Support and Confidence Are at Odds: The Public's Understanding of the Social Security Program" (Washington, DC: National Academy of Social Insurance, 1994).

³² See *EBRI Notes*, June 1994.

³³ Robert E. Hall, "The Importance of Lifetime Jobs in the US Economy," *American Economic Review* (September 1982).

³⁴ See *EBRI Issue Brief* no. 121.

³⁵ See endnote #33.

³⁶ See endnote #33.

³⁷ See endnote #16.

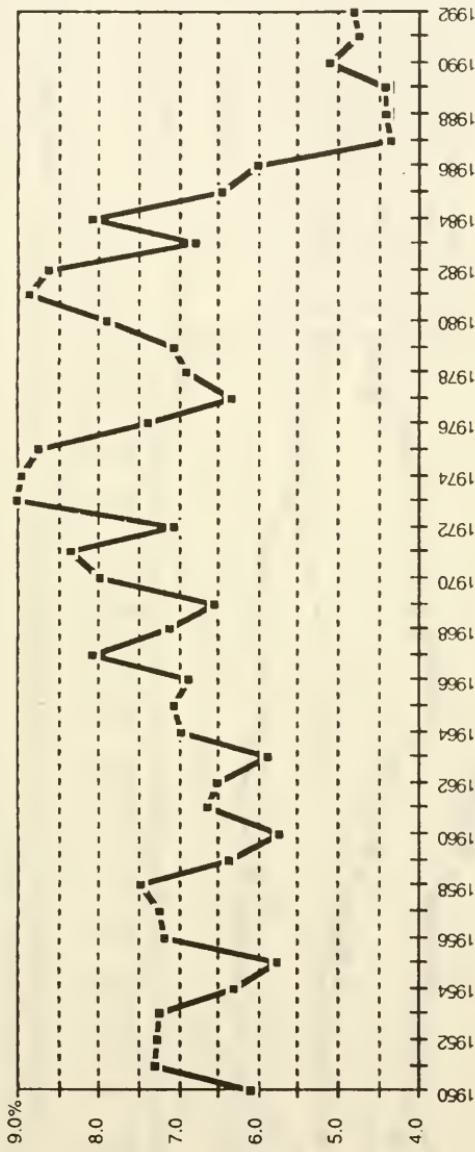
³⁸ See endnote #33.

³⁹ U.S. Department of Labor, Bureau of Labor Statistics, *Work and Family: Jobs Held and Weeks Worked by Young Adults*, Report 827 (Washington, DC: U.S. Government Printing Office, 1992).

⁴⁰ U.S. Department of Labor, Bureau of Labor Statistics, *Work and Family: Turning Thirty - Job Mobility and Labor Market Attachment*, Report 862 (Washington, DC: U.S. Government Printing Office, 1993).

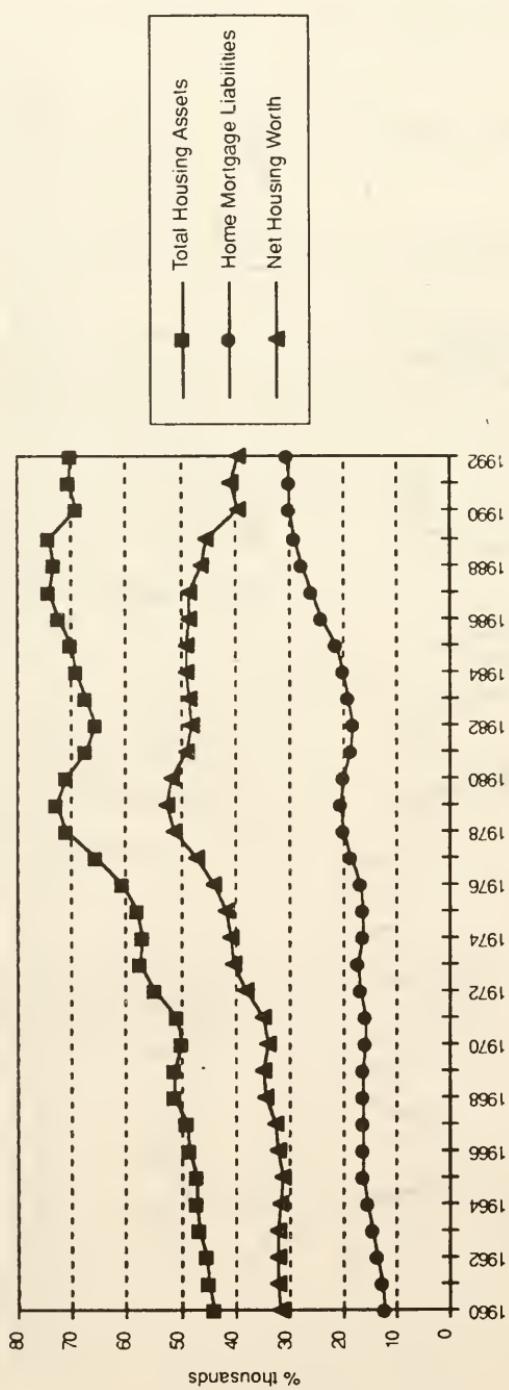
⁴¹ See *EBRI Issue Brief* no. 121.

Chart 1
Personal Savings as a Percentage of Disposable Income, 1950-1992



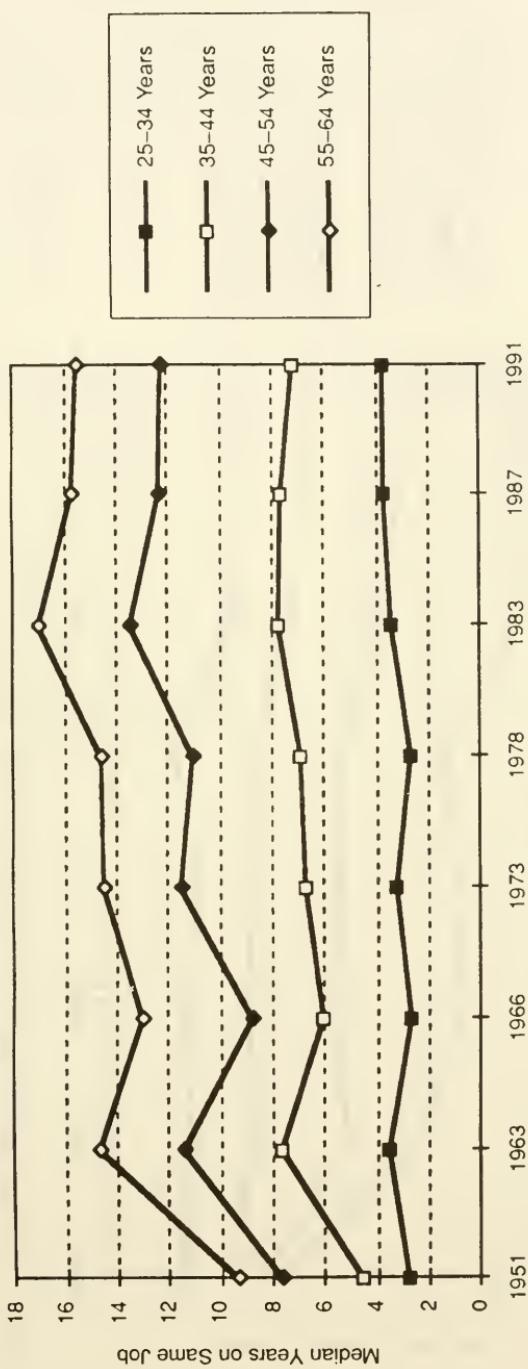
Source: Employee Benefit Research Institute tabulations based on U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, July 1993 (Washington, DC: U.S. Government Printing Office, 1993); *The National Income and Product Accounts of the United States: Statistical Supplement, 1959-1988*, Vol. 2 (Washington, DC: U.S. Government Printing Office, 1992); and *National Income and Product Accounts of the United States*, Vol. 1, 1929-58 (Washington, DC: U.S. Government Printing Office, 1993).

Chart 2
Per Household Value of Owner-Occupied Housing, 1960-1992 (in 1992 Constant Dollars)



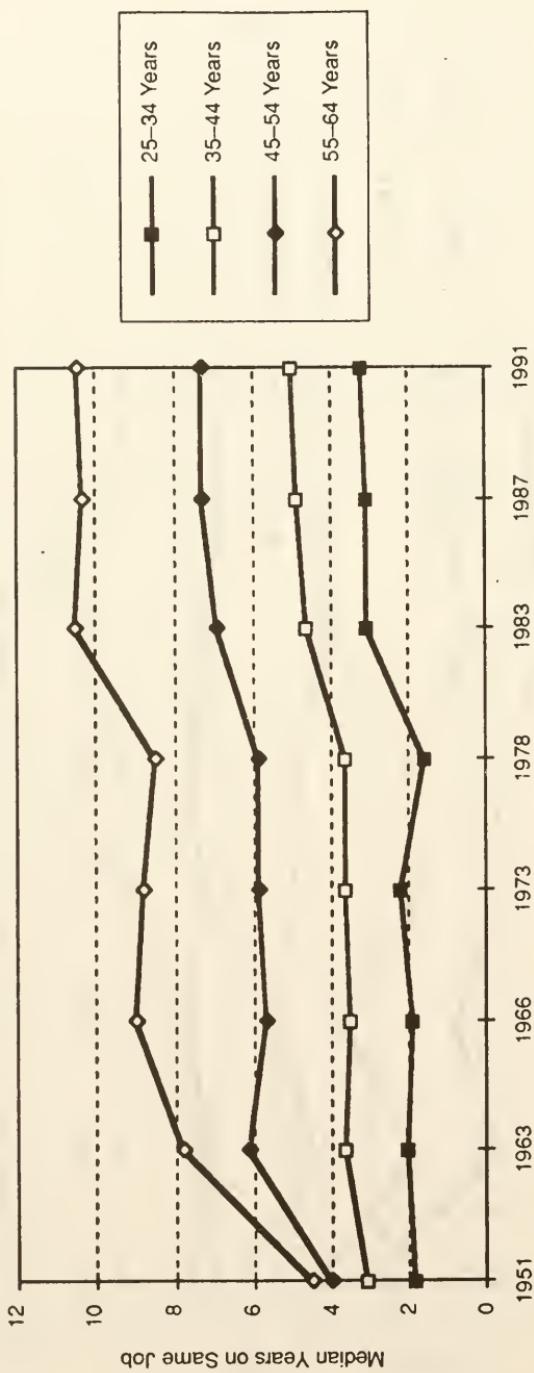
Source: Board of Governors of the Federal Reserve System, *Balance Sheets for the U.S. Economy 1945-92* (Washington, D.C. Board of Governors of the Federal Reserve System).

Chart 3
Prime Age Male Job Tenure Trends, by Worker A



Source: Employee Benefit Research Institute tabulations of U.S. Government data

Chart 4
Prime Age Female Job Tenure Trends, by Worker A



Source: Employee Benefit Research Institute tabulations of U.S. Government data.

Table 1
Pension Assets over Time, Selected Years 1946 to Present

End of	Single Employer				Single Employer		
	Defined Benefit	Defined Contribution	Multi-employer	Total	Defined Benefit	Defined Contribution	Multi-employer
	(\$ billions)				percentage)		
1985	\$ 648	\$ 385	\$123	\$1,157	56.1%	33.3%	10.6%
1990	848	651	225	1,723	49.2	37.8	13.0
1991	1,032	834	267	2,133	48.4	39.1	12.5
1992	1,065	948	288	2,300	46.3	41.2	12.5
1993	1,135	1,062	308	2,505	45.3	42.4	12.3
93Q2	1,111	1,007	297	2,415	46.0	41.7	12.3
93Q3	1,134	1,052	307	2,493	45.5	42.2	12.3
93Q4	1,135	1,062	308	2,505	45.3	42.4	12.3
94Q1	1,086	1,022	298	2,406	45.1	42.5	12.4

Financial Assets at End of Period (Flow of Funds Definitions)				Percentage Distribution of Financial Assets as a Percentage of Total Financial Assets of Asset Type in the Economy			
Period	Private Trusteed	Private Life Insurance	State and Local	Year	Equity	Taxable Bonds	Cash Items
	(\$ billions)						
1946-1950	\$ 7.1	\$ 5.6	\$ 4.9	1950	0.8%	3.2%	0.2%
1951-1955	18.3	11.3	10.8	1955	2.0	6.2	0.2
1956-1960	38.1	18.9	19.7	1960	4.0	9.4	0.2
1961-1965	74.4	* 27.4	34.1	1965	6.1	12.8	0.2
1966-1970	112.0	40.8	60.3	1970	9.4	13.7	0.3
1971-1975	225.0	70.1	104.8	1975	16.6	15.0	1.8
1976-1980	469.6	158.2	196.6	1980	18.2	14.5	2.5
1981-1985	1,087.6	346.7	398.1	1985	25.6	15.1	4.1
1986-1990	1,629.2	636.1	736.6	1990	28.6	14.6	6.0
1991	2,055.5	678.1	859.7	1991	27.9	14.9	7.2
1992	2,144.7	694.7	969.2	1992	27.3	14.7	6.6
1993	2,336.5	n/a	1,065.2	1993	27.5	14.3	7.0

Source: Employee Benefit Research Institute, *Quarterly Pension Investment Report*, 1st Quarter 1994 (Washington, DC: Employee Benefit Research Institute, June 1994); tables 3, 20, and 26.

Table 2
Trends in Pension Coverage, Participation, and Vesting Among Civilian Workers
Aged 16 and Over, 1979, 1983, 1988, 1993

	Covered Workers (millions)	Partici- pants (millions)	Entitled Workers (millions)	Percentage of Workers Covered	Percentage of Workers Participating	Percentage of Covered Workers Participating	Percentage of Workers Entitled	Percentage of Partici- pants Entitled
All Civilian Workers								
1979	95	53	44	23	56%	46%	81%	24%
1983	99	52	43	24	52	43	83	24
1988 ^a	114	62	47	32	55	42	76	28
1988 ^b	114	65	49	38	57	43	75	34
1993	118	67	51	44	57	44	76	38
ERISA Work Force								
1988 ^b	53	36	30	22	68	56	83	42
1993	58	39	32	27	67	56	83	48
Private Wage and Salary								
1979	71	38	30	14	54	43	79	20
1983	74	37	29	15	49	40	80	20
1988 ^a	86	44	32	21	51	37	72	24
1988 ^b	86	47	34	25	55	39	72	29
1993	89	49	36	30	56	41	73	34
Public Wage and Salary								
1979	16	14	12	7	87	77	88	45
1983	16	13	12	8	83	73	88	48
1988 ^a	17	16	13	9	92	77	83	54
1988 ^b	17	16	13	11	92	77	83	66
1993	19	17	14	12	89	75	84	67
Unincorporated Self-Employed								
1979	9	1	1	1	13	13	100 ^d	13
1983	9	2	2	2	20	20	100 ^d	20
1988 ^a	10	2	2	2	21	21	100 ^d	21
1988 ^b	10	2	2	2	21	21	100 ^d	21
1993	10	1	1	1	14	14	100 ^d	14
Nonagricultural Wage and Salary								
1979	85	52	42	21	61	50	81	25
1983	88	50	41	22	56	46	82	25
1988 ^a	102	60	45	30	59	44	75	29
1988 ^b	102	63	47	36	62	46	75	35
1993	106	66	50	43	62	47	76	40
All Males								
1979	56	33	29	16	59	51	87	28
1983	56	30	26	16	54	47	88	28
1988 ^a	63	35	28	20	55	45	81	31
1988 ^b	63	36	29	23	58	46	80	36
1993	64	36	30	25	56	45	81	39
All Females								
1979	39	21	15	7	52	38	73	18
1983	43	21	16	8	50	38	76	20
1988 ^a	51	27	19	13	54	38	70	25
1988 ^b	51	29	20	15	57	40	70	30
1993	54	32	23	19	58	42	72	36

Source: EBRI tabulations of the May 1979, May 1983, May 1988, and April 1993 Current Population Survey employee benefit supplements.

^aWorkers who reported that their employer or union did not have a pension plan or retirement plan for any of its employees were not counted as covered, even if they did report that their employer offered a profit-sharing plan or a stock plan in a followup question.

^bParticipants who reported not being able to receive some benefits at retirement age if they were to leave the plan now were not counted as vested, even if they later responded that they could receive a lump sum distribution if they left their plan now. This allows comparability with the tabulations from earlier years.

^cWorkers who reported that their employer or union did not have a pension plan or retirement plan for any of its employees were counted as covered if they did report that their employer offered a profit-sharing plan or a stock plan in a followup question. Participants who reported not being able to receive some benefits at retirement age if they were to leave the plan now were counted as vested if they later responded that they could receive a lump sum distribution if they left their plan now. This allows comparability with the tabulations from earlier years.

^dSelf-employed workers who contribute to individual retirement accounts are considered to be covered, participating, and entitled to benefits.

Table 3
Private Pension Plans and Participants

	1975	1983	1986	1987	1988	1989	1990
(thousands)							
Total Plans	311	603	718	733	730	731	712
Defined benefit ^a	103	175	173	163	146	132	113
Defined contribution	208	428	545	570	584	599	599
Defined contribution as percentage of total	67%	71%	76%	78%	80%	82%	84%
(millions)							
Total Participants	45	69	77	78	78	76	77
Defined benefit ^b	33	40	40	40	41	40	39
Defined contribution	12	29	37	38	37	36	38
Defined contribution as percentage of total	26%	42%	48%	49%	48%	48%	50%
Active Participants	31	39	41	42	42	43	42
Primary plan is defined benefit	27	30	29	28	28	27	26
Primary plan is defined contribution	4	9	13	13	14	15	16

Source: Employee Benefit Research Institute.

Table 4
Primary Defined Benefit and Defined Contribution Plan and Active Participant Trends

Active Participants	Primary Plans					Active Participants (thousands)				
	1985	1989	1990	Net change 1985-1990	Net change 1989-1990	1985	1989	1990	Net change 1985-1990	Net change 1989-1990
						Defined Benefit Plans				
2-9	88 124	59 966	45 796	-42 328	-14 170	353	246	189	-164	-57
10-24	24 267	17 791	15 624	-8 643	-2 167	369	271	244	-125	-27
25-49	14 178	9 736	8 605	-5 573	-1 131	491	340	304	-187	-36
50-99	11 303	9 013	8 346	-2 957	-667	808	645	599	-209	-46
100-249	9 534	7 109	6 563	-2 971	-546	1 498	1 135	1 040	-458	-95
250-499	4 670	4 022	3 647	-1 023	-375	1 651	1 430	1 293	-358	-137
500-999	3 149	2 701	2 463	-686	-238	2 222	1 910	1 751	-471	-159
1,000-2,499	2 360	2 220	2 090	-270	-130	3 636	3 434	3 221	-415	-213
2,500-4,999	847	833	798	-49	-35	2 930	2 940	2 802	-128	-138
5,000-9,999	455	450	434	-21	-16	3 141	3 153	3 015	-126	-138
10,000-19,999	198	213	223	25	10	2 749	2 956	3 134	385	178
20,000+	175	178	161	-14	-17	8 985	8 792	8 711	-274	-81
None or none reported	10 280	18 485	18 139	7 859	-346	-	-	-	-	-
Total	169 540	132 717	112 889	-56 651	-19 828	28 834	27 252	26 303	-2 531	-949
Defined Contribution Plans										
2-9	199 704	334 762	266 129	56 425	-68 633	852	1 410	1 127	275	-283
10-24	70 424	107 113	94 054	23 630	-13 059	1 056	1 637	1 476	420	-161
25-49	31 406	48 351	45 748	14 342	-2 603	1 091	1 680	1 585	494	-95
50-99	17 620	29 997	27 434	9 814	-2 563	1 224	2 081	1 909	685	-172
100-249	8 878	13 334	13 658	4 780	324	1 331	1 991	2 070	739	79
250-499	2 552	3 599	4 144	1 592	545	868	1 239	1 428	560	189
500-999	1 185	1 675	1 838	653	163	808	1 151	1 286	458	115
1,000-2,499	784	1 148	1 103	319	-45	1 194	1 709	1 671	477	-38
2,500-4,999	219	265	310	91	45	752	907	1 072	320	165
5,000-9,999	97	107	130	33	23	683	726	869	186	143
10,000-19,999	34	59	44	10	-15	460	788	626	166	-162
20,000+	29	36	27	-2	-9	1 100	1 329	1 151	51	-178
None or none reported	13 082	38 839	40 473	27 391	1 634	-	-	-	-	-
Total	346 014	579 285	495 092	149 078	-84 193	11 420	16 647	16 250	4 830	-397

Source: Employee Benefit Research Institute tabulations of 1985, 1989 and 1990 Form 5500 annual reports filed with the Internal Revenue Service

Table 5
Retirement Benefit Payments from Private and Public Sources,
Selected Years 1987-1990

Source of Benefit ^a	1987	1988	1989	1990	Total 1987-1990
(\$ billions)					
Private Pensions	\$120.8	\$124.1	\$133.6	\$141.2	519.7
Federal Employee Retirement ^b	44.9	48.1	50.6	53.9	197.5
State and Local Employee Retirement	31.2	34.1	36.6	39.2	141.1
Subtotal	196.9	206.3	220.8	234.3	858.3
Social Security Old-Age and Survivors Insurance Benefit Payments ^c	\$183.6	\$195.5	\$208.0	\$223.0	810.1
Total	\$380.5	\$401.8	\$428.8	\$457.3	1,668.4
Total	100.0%	100.0%	100.0%	100.0%	100.0%
(percentage of total)					
Private Pensions	33.8%	30.9%	31.2%	30.9%	31.1%
Federal Employee Retirement ^b	11.8	12.0	11.8	11.8	11.8
State and Local Employee Retirement	8.2	8.5	8.5	8.6	8.5
Subtotal	51.8	51.3	51.5	51.2	51.4
Social Security Old-Age and Survivors Insurance Benefit Payments ^c	48.3	48.7	48.5	48.8	48.6

Source: Employee Benefit Research Institute tabulations based on U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business, January 1992* (Washington, DC: U.S. Government Printing Office, 1992), *The National Income and Product Accounts of the United States: Statistical Supplement, 1959-1988*, Vol. 2 (Washington, DC: U.S. Government Printing Office, 1992), and U.S. Department of Health and Human Services, Social Security Administration, *1991 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds* (Washington, DC: U.S. Government Printing Office, 1991).

^aIncludes only employment-based retirement benefits

^bIncludes civilian and military employees

^cIncludes payments to retired workers and their wives, husbands, and children

Table 6
Lump-Sum Total Distributions from Tax Qualified Plans, 1987-1990

	1987	1988	1989	1990	Total 1987-1990
Number of Distributions					
Aggregate	11.4	12.2	11.6	10.8	46.0
Non-IRA ^a /SEP ^b	8.8	c	c	8.2	c
IRA/SEP	2.6	c	c	2.6	c
Total Amounts Distributed					
Aggregate	\$80.3	\$85.2	\$115.3	\$125.8	\$406.6
Non-IRA/SEP	65.9	c	c	107.2	c
IRA/SEP	14.4	c	c	18.6	c
Average Amounts Distributed					
Aggregate	\$7.0	\$7.0	\$10.0	\$11.7	\$8.8
Non-IRA/SEP	7.5	c	c	13.2	c
IRA/SEP	5.7	c	c	7.0	c

Source: Employee Benefit Research Institute/Internal Revenue Service (IRS) tabulations of IRS Forms 1099-R, Statement for Recipients of Total Distributions From Profit-Sharing, Retirement Plans, Individual Retirement Accounts, Insurance Contracts, Etc., 1987-90.

^aIndividual retirement account

^bSimplified employee pension

^cNot available

Table 7
Inclusion of Pension Plans in Personal Savings

Included in Personal Savings?	
Private Pension Plans	
Defined benefit plans	
employer contributions	Yes
investment income	Partially
interest, dividends, rent, and royalties (imputed)	Yes
capital gains	No
benefit payments	No ^{ba}
Defined contribution plans	
individual contributions	Yes ^b
employer contributions	Yes
investment income	Partially
interest, dividends, rent, and royalties (imputed)	Yes
capital gains	No
benefit payments	No ^b
Public Pension Plans	
Defined benefit plans	
employer contributions	No
individual contributions	No
investment income	No
benefit payments	Yes
Defined contribution plans	
individual contributions	Yes ^b
employer contributions	Yes
investment income	Partially
interest, dividends, rent, and royalties (imputed)	Yes
capital gains	No
benefit payments	No ^a

^aBenefit payments are not included in private plans and public defined contribution plans because that would create double counting in the National Income and Product Accounts of the contributions and investment income that are reported during the period that they occur

^bIndividual contributions to private defined contribution plans are included in personal savings to the extent that they are included in wage and salary disbursements in employers' reports for unemployment insurance. Virtually all states require employers to report employee contributions

Table 8
**Monthly Social Security Retirement Benefits^a Under
 Different Normal Retirement Ages**

Age Retired	Assumed Normal Retirement Age (NRA)		
	Age 65 (Current NRA)	Age 67 (Eventual NRA)	Age 70 ^b (Alternative NRA)
62	\$ 707	\$636	\$530
65	884	766	636
67	955	884	707
70	1,039	977	884

Source: Employee Benefit Research Institute simulation based on monthly benefits calculated in William M. Mercer, *Guide to Social Security and Medicare* (Louisville, KY: William M. Mercer, December 1993)

^a Assumes individuals in each scenario will reach normal retirement age on January 1, 1995 and begin receiving benefit payments on their 62nd, 65th, 67th, or 70th birthday. Normal retirement benefits are based on average indexed monthly earnings of \$2,000

^b The reduction in benefits for early retirement and the increase in benefits for late retirement are calculated according to current law

Table 9
Median Years with Current Employer

Age and Sex	1951	1963	1966	1973	1978	1983	1987	1991
Both Sexes	3.4	4.6	4.2	3.9	3.6	4.4	4.2	4.5
14-17	0.7	0.7	0.6	0.7 ^b	a	a	0.5 ^b	a
18-19	0.6	0.5	0.5	0.6	a	a	0.5	a
20-24	1.3	1.1	1.0	1.3	a	a	1.6	a
16-24	a	a	a	a	0.7	1.1	a	1.2
25-34	2.6	3.0	2.7	2.8	2.6	3.3	3.4	3.5
35-44	3.2	6.0	6.0	5.2	5.0	5.8	6.1	6.0
45-54	6.3	9.0	8.8	8.6	8.3	10.3	9.6	10.0
55-64	8.0	11.8	13.0	11.9	11.0	13.6	12.7	12.4
65 and over	10.0+	13.8	13.7	12.6	11.0	13.2	12.4	11.1
Males	3.9	5.7	4.2	4.6	4.5	5.1	5.0	5.1
14-17	0.8	0.7	0.6	0.6 ^b	a	a	0.5 ^b	a
18-19	0.6	0.5	0.5	0.6	a	a	0.5	a
20-24	1.2	1.1	1.0	1.2	a	a	1.7	a
16-24	a	a	a	a	0.7	1.1	a	1.4
25-34	2.8	3.5	2.7	3.2	2.7	3.4	3.7	3.7
35-44	4.5	7.6	6.0	6.7	6.9	7.7	7.6	7.2
45-54	7.6	11.4	8.8	11.5	11.0	13.4	12.3	12.2
55-64	9.3	14.7	13.0	14.5	14.6	17.0	15.7	15.5
65 and over	10.0+	16.6	13.7	13.9	13.5	14.6	15.0	13.1
Females	2.2	3.0	2.8	2.8	2.6	3.3	3.6	3.8
14-17	0.5	0.6	0.6	0.6 ^b	a	a	0.5 ^b	a
18-19	0.6	0.5	0.5	0.6	a	a	0.5	a
20-24	1.4	1.1	1.1	1.2	a	a	1.5	a
16-24	a	a	a	a	0.7	1.1	a	1.1
25-34	1.8	2.0	1.9	2.2	1.6	3.1	3.1	3.2
35-44	3.1	3.6	3.5	3.6	3.6	4.6	4.9	5.0
45-54	4.0	6.1	5.7	5.9	5.9	6.9	7.3	7.3
55-64	4.5	7.8	9.0	8.8	8.5	10.5	10.3	10.4
65 and over	4.9	8.8	11.2	10.9	8.4	11.9	10.8	10.4

Source: (For years 1951, 1963, 1966, and 1978) Employee Benefit Research Institute compilation, U.S. Department of Labor, Bureau of Labor Statistics, *Monthly Labor Review*: September 1952, October 1963, January 1967, December 1974, and December 1979 (Washington, DC: U.S. Government Printing Office, 1952, 1963, 1967, 1974, and 1979). (For years 1973 and 1987) The Wyatt Company, *The Compensation and Benefits File: January 1989*, vol. 5, no. 1; (for years 1983 and 1991) Bureau of Labor Statistics News Release, *Employee Tenure and Occupational Mobility in the Early 1990's* USDL 92-386 (Washington, DC: U.S. Department of Labor, June 26, 1992).

^aData not available.

^bThe data represent individuals aged 16 to 17.

PREPARED STATEMENT OF C. EUGENE STEUERLE

Mr. Chairman and Members of the Subcommittee: The issues you raise today about the adequacy of U.S. saving are both extremely important and extraordinarily difficult. The data on saving used by economists are tenuous, partial, and often derived indirectly. In many analyses, such as those applied to tax policy toward saving, gross deposits in retirement assets and other accounts are often confused with net saving in the economy. Meanwhile, borrowing and dissaving are sometimes ignored. Questions on the adequacy of saving come up as part of discussions on-budget policy, retirement policy, financial institutions, tax policy, education and research policy, and international competitiveness. Often, however, the implications cut across policy fields. For example, adoption of a consumption tax makes easier the withdrawal of tax-favored saving in years before retirement.

Perhaps there is a good reason for the difficulty with determining the adequacy of saving and the appropriateness of the government's overall policy toward saving. Just as saving is a residual after consumption is subtracted from income, so, in my view, is good saving policy a residual that derives from other good policies, in particular, with respect to budgets, pensions, taxes, financial markets, education and training. Get government debt onto at least a sustainable path and free up resources for each generation to allocate to the needs of its time, and saving in the economy will be better allocated and MIGHT increase. Try to insure that individuals will have adequate resources in retirement, and saving will be better allocated, and it MIGHT increase. Determine a tax policy that treats different sources of income more equally, and individuals will allocate their saving more efficiently, and they MIGHT increase it. Develop efficient capital markets, and investment will flow more easily into productive resources and be used by those with the best ideas, and saving MIGHT increase.

GROSS SAVING VERSUS NET SAVING

Please note that keep using the word, "might." Perhaps the only sure way that government can increase net saving temporarily in the economy is to engage in industrial policy with respect to investment, but past failures there have been monumental. Economists share much of the blame for that failure. The simple correlation of investment with growth across different market economies led many to the simple, but incorrect, conclusion that government merely needed to increase something measured as investment, and economic growth rates would rise. Communist countries were especially enamored with this type of calculation and often devoted very high portions of national income to items that obtained the "investment" label, often with disastrous short-term and long-term consequences. The United States traditionally has shied away from these forms of industrial policy, but some of our economic cycles, as in case of commercial office buildings, most likely could have been moderated if we had subsidized such investment more evenly through tax and financial policy.

For different reasons, aggregate saving is also difficult to regulate and control. An addition to one's saving, on the other hand, only adds to the stock of gross financial assets, not necessarily to net economic saving. For these reasons, among others, the economy's saving is calculated basically from the physical investment numbers.

One of our first inclinations is to equate the economy's saving with money put in saving and similar accounts. In point of fact, for every depositor there is a borrower. Financial assets become debt on the other side of the ledger. While this debt may support higher levels of investment, it may also support higher levels of consumption by individuals, higher levels of dividend payout by corporations, or higher salaries within the firm. Significant rises in pension assets during the postwar period, for example, have been accompanied by large increases in consumer debt. Relative declines in government debt-to-GDP ratios during one period of our history were also accompanied by rises in private sector debt-to-GDP, much of which did not translate into increased private investment.

In effect, money is fungible. There is no clean way to trace how much an additional dollar of gross deposits or gross reduction in borrowing by one economic actor affects the saving and investment behavior of another actor and the net ultimate impact on the economy.

One example of how increased financial assets have translated into increased debt is shown in Figure 1. As can be seen, every sector of the economy has witnessed fairly significant rises in debt-to-asset ratios. While the nonfinancial corporate sector starts out the postwar period with the highest ratio, the nonfarm, noncorporate sector eventually catches up and moves into the lead. Most of the assets of this sector are real estate, which becomes highly leveraged. The debt-to-asset ratio for farm business also rose for many years as farmers borrowed more against the value of

their land than they reinvested on net in capital equipment. The household sector, in turn, borrows more than ever before, often for consumption purposes. Tremendous expansion in credit card and secondary mortgages are partial reflections of this trend.

PHYSICAL CAPITAL VERSUS HUMAN CAPITAL

Complicating the saving issue even more these days is the movement from an industrial to a technological and service sector economy. A dollar of gross saving can easily be borrowed or invested by a firm in research, training of employees, hiring of professionals to figure out how to break into foreign markets, and so forth. Individuals also spend much time educating and training themselves. These investments in human capital and knowledge are huge in size, almost impossible to measure, and not counted as "investment" in our national accounts. More direct individual and government investments in education and research are not counted in traditional measures of saving, although actual expenditures are sometimes measured separately. In effect, our saving figures are also understated by the amount of net investment in human capital.

Although the focus of this hearing is on saving, as measured in the more traditional sense, in a larger sense its real concern is growth and the adequacy of future income. Growth is generated primarily by hard work, inventiveness and innovation, technological change, the generation of new ideas, and the application of superior methods. Saving can only go so far in substituting for those other sources of growth. An inventive and creative society, moreover, is more likely to generate the rates of return that attract the saving and capital necessary to build new and better products.

GOVERNMENT DEBT

When looking at the issue of national saving, it is hard for any economist not to be concerned about the size of the budget deficit. That government dissaving has been on an unsustainable path is independent of how much of that dissaving translates into a decline in physical capital investment.

Borrowing from abroad, moreover, is less likely to continue as a major source of future investment dollars. Indeed, the industrialized countries of the world together may still be on an unsustainable budgetary path. At a recent Urban Institute conference on the world-wide fiscal situation, for instance, the deterioration in fiscal budgets was shown to be widespread and, by some measures, worse than ever. Gross public debt in industrialized countries has continued to rise relative to gross domestic product (GDP), while deficits absorb significant percentages (often 30 or 40 percent) of net private saving.

Table 1.—GROSS PUBLIC DEBT OF THE UNITED STATES AND INDUSTRIALIZED COUNTRIES

(Percent of GDP)

	1970	1980	1985	1990	1993
U.S.	45.4	37.7	48.1	55.4	63.4
Industrialized Countries	41.1	42.0	55.2	59.0	66.7

SOURCE: Vito Tanzi & Domenico Fanizza, based on OECD National Accounts, and World Economic Outlook.

While the U.S. may be an open market that can temporarily borrow from abroad, the world is a closed market. The implication of this fiscal binge in industrial countries, again, stretch beyond issues of capital formation. The interest payments required by higher levels of public debt reduce the amount of current expenditures that can be financed out of a given tax rate. Declining flexibility to respond to new domestic and foreign demands can also have serious implications for well-being and growth.

PUBLIC AND PRIVATE RETIREMENT POLICY

The invitation for this hearing asked that attention to certain issues of retirement policy, including our ability to meet the needs of future retirees. In my view, our retirement policy has become a mishmash, with goals less and less clearly articulated even while public spending on cash and health benefits in retirement continue to occupy increasingly dominant shares of the federal budget. The nation is quite capable of providing a decent living in retirement to most Americans, but the ways

in which we allocate government funds and provide incentives for private sector behavior are sometimes contradictory and less than fully responsive to the greater needs of society. Below I provide several reflections on this issue.

The insurance Value of Social Security and Medicare. Along with Jon Bakija, I recently examined the increases in benefit levels in Social Security from an annual and a lifetime perspective. For an average-wage one-earner couple retiring in 1960, annual benefits were about \$9,400 (in 1993 dollars); for a similar couple retiring in 1995, that annual benefit rose to about \$14,600, an increase of about 55 percent.

If we instead calculate the lifetime insurance value (the cost, if purchased at age 65) of all Social Security benefits, including Medicare, the increase is much more dramatic. The insurance value of OASI cash benefits equals about \$144,000 (in 1993 dollars) for the couple in 1960 (there was no Medicare then). For the couple retiring in 1995, the insurance value of cash benefits and Medicare together is about \$469,000—more than a three-fold increase. This figure is composed roughly of about equal amounts of cash benefits and Medicare benefits. By the time the tail end of the baby boomers retire in 2030, the insurance value for this average-wage couple is scheduled to rise well above \$800,000, with a large portion of the increase being in health benefits.

The increase in insurance value is due mainly to longer life spans, more years receiving cash benefits in retirement, the provision of medical insurance, the rapidly increasing level of real benefits in the form of medical services, and more years of receiving medical benefits in retirement.

These scheduled increases into the future, as we know, are not sustainable—in particular, in the area of medical care. My purpose is showing the insurance calculations is to demonstrate that even at today's level of benefits, the total money spent on Social Security and Medicare could provide income support for individuals that would be "adequate" for a variety of purposes. As a nation, however, we have decided to allocate the money mainly on the basis of formulas and rules determined years ago. As one consequence, there remain a significant number of poor elderly, especially among the very old, even while we provide more years in retirement and increase dramatically levels of health benefits (including higher salaries for medical service providers). These additional years of retirement and health benefits can be interpreted as orienting benefits away from need, further from those years closer to death, and more toward years when we are both healthier and wealthier.

The Effect of Earlier Retirement and the "One-Hoss Shay" Model of Retirement on Income and Saving. Another difficulty with both our public and private retirement systems is that they are built on the model of the "one-hoss shay." The one-hoss shay was a piece of physical capital that was useful up to a point, then simply fell apart. Our public and private retirement systems operate in a similar fashion, treating individuals as if they fall apart instantaneously and suddenly become completely unproductive at some age like 62 or 65. If one were to set up accounts for human capital, what we would find was that each year a large stock of still valuable capital was abandoned and depreciated to zero through this somewhat arbitrary pattern of retirement. This pattern, by the way, appears to be mainly a consequence of gearing retirement to industrial workers. It did not apply in the farm economy of the past, and it is not necessarily appropriate for the service and technological society of today and tomorrow.

Now when individuals drop completely out of the work force and do so earlier and earlier in their lives, they reduce the total amount of income produced in the economy. The effect on measured saving and saving rates is more difficult to predict. Saving rates, for example, can go up when income goes down. As an example, suppose we were to provide government subsidies in retirement at even earlier ages, say, 60—as envisioned partially through the subsidy design of many health reform bills before Congress today. A larger portion of the population might then save more to supplement these additional years in retirement, and rates of saving might go up. But total income in the economy likely would fall because of the drop in labor output. Put in a more technical way, the rise in the rate of depreciation of human capital is a form of dissaving that easily could more than offset a rise in either the amount or rate of physical capital investment.

Saving Patterns by Age. In an article in 1991, Barry Bosworth, Gary Burtless, and my colleague, John Sabelhaus, examined saving patterns by age in the early 1960's and early 1970's and contrasted this to the early 1980's. Although they found an overall decline in personal saving rates, the change, as a percent of income, was smallest for age groups between ages 25 and 44. The much larger declines occurred in older age groups. I would extend their analysis even further. Suppose one took into account the amount of social security tax paid by the younger generations. In this more extensive calculation, younger workers could be shown to be saving more

than ever before. Just as in the case of private saving being borrowed to support private debt for consumption, however, this public saving can be viewed as financing the public dissaving of those to whom transfers were made.

The Adequacy of the Private Pension System. By some measures, the private pension system may appear to be in better shape than ever before. At the beginning of this year households held \$4,776 billion in pension fund reserves, up from \$356 million twenty years ago. This thirteen-fold increase can be contrasted with increases in disposable income and net worth of about five-to-one. The increase in pension reserves was due to a variety of factors, including the maturation of many plans, vesting and funding requirements, and, more recently, a rise in the value of corporate stock relative to the economy.

With maturity, however, several problems remain. Here are just a few. First, it now appears that only about half the population can ever be expected to rely upon private pensions for any significant support in retirement. Although a much larger fraction of workers will carry *some* benefits into retirement, a significant portion of them will have accruals insufficient to affect their lifestyles significantly. Private pension policy today serves best those with above-average incomes who are more likely to save for retirement.

Second, recent shifts toward defined contribution plans have opened up windows of opportunity for withdrawing money prior to retirement. My colleague on this panel, Dallas Salisbury, has documented much of this shift. These withdrawals have implications both for the adequacy of retirement and later calls upon the public sector for support in old age.

Third, today's pension discrimination rules are contradictory, complicated, and subject to the whims of inflation. At moderate rates of inflation such as 4 percent, for instance, a typical defined benefit plan can provide benefits for an additional year of work ranging from 2 percent of pay for a 25-year-old employee to 35 percent of pay for a 65-year-old employee. Discrimination rules for defined contribution plans, on the other hand, tend to require more equal percentages of pay to be contributed for all employees. We need to sort out and decide just what these discrimination rules are intended to accomplish and whether they achieve their purpose of expanding coverage for low- and moderate-income workers.

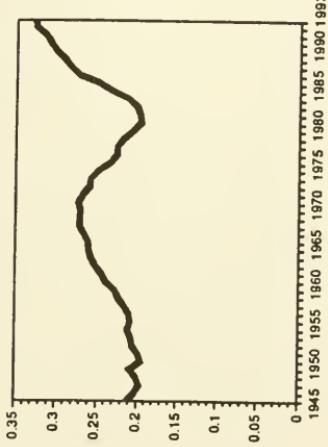
CONCLUSION

What does this cursory glance at saving policy tell us? I believe it tells us that there is no simple or quick fix. Instead, we must try to get each aspect of policy correct as we go along. To do so, we must go back to fundamentals by examining the basic goals of each policy and whether monies allocated in direct expenditures and tax subsidies are being spent well toward meeting those goals efficiently. At a minimum, budget policy requires less government dissaving and greater control by policy makers over allocating funds toward current needs, Social Security policy demands the restoration of balance in the trust funds and greater orientation to the real needs of old age, and private pension policy requires more attention to the retirement needs of those with only average incomes or less.

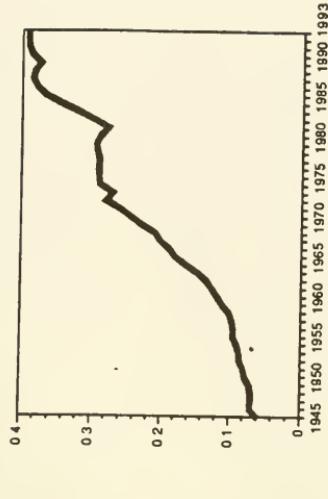
DEBT-TO-ASSET RATIO BY SECTOR OF ECONOMY, 1945-1993

FIGURE 1

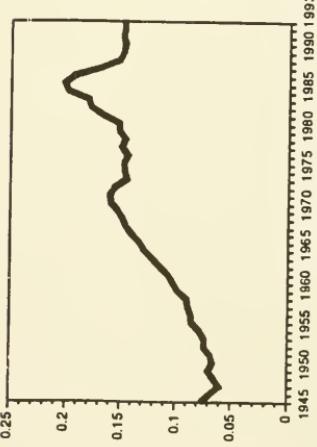
Nonfinancial Corporate



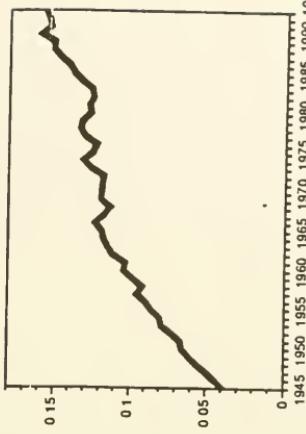
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